

Water Quality Program

Comment and Response Summary



Volume 1: CALFED Agencies



CALFED
BAY-DELTA
PROGRAM

Draft: February 4, 1998

WATER QUALITY PROGRAM COMMENT AND RESPONSE SUMMARY

TABLE OF CONTENTS

NOTE TO READER	ii
CALFED AGENCIES	iii
INVENTORY OF COMMENTS FROM CALFED AGENCIES	iv
DIRECTORY OF COMMENTS FROM CALFED AGENCIES	viii

NOTE TO READER

During Phase I and II of the CALFED Water Quality Program, CALFED staff have received numerous written comments from various agencies and stakeholders. This *Water Quality Program Comment and Response Summary* has been developed to provide a mechanism for compiling, tracking, and responding to written comments received to date on the Water Quality Program from CALFED agencies and stakeholders. It has been separated into two volumes.

Volume I is a compilation of 94 written comments received to date from 9 CALFED agencies regarding the CALFED Water Quality Program. The *Inventory of Comments from CALFED Agencies* catalogs these comments by agency. For a list of state and federal CALFED agencies, please refer to the following page. *Volume II* is a compilation of written comments received to date from stakeholders regarding the CALFED Water Quality Program.

In addition to written comments, both volumes contain compilations of responses which have been developed by various CALFED staff throughout the development of the program. To the extent possible, the sources of these responses have been documented to ensure consistency with other CALFED efforts to respond to comments.

Volume I has been organized into five key topic areas: Water Quality Program, Water Quality Targets, Water Quality Actions, Water Quality Projects, and Water Quality Documents. This organizational structure has been used to facilitate the revision of documents and the development of responses to similar types of comments.

CALFED AGENCIES

Fifteen agencies, with varying degrees of responsibility, are involved with the development and oversight of the CALFED Bay-Delta Program. Following is a list of the 15 CALFED agencies.

STATE AGENCIES(5)

California Resources Agency
California Environmental Protection Agency
Department of Fish and Game
Department of Water Resources
State Water Resources Control Board

FEDERAL AGENCIES (10)

Western Area Power Administration
Bureau of Land Management
National Marine Fisheries Service
US Fish and Wildlife Service
US Bureau of Reclamation
US Forest Service
US Environmental Protection Agency
US Geological Survey
US Army Corps of Engineers
Natural Resources Conservation Service

DIRECTORY OF COMMENTS FROM CALFED AGENCIES

- I. Water Quality Program**
 - General
 - Linkages Between Programs
 - Modeling
 - Research
 - Studies

- II. Water Quality Targets**
 - General
 - Boron
 - Bromide
 - Cadmium, Copper, Zinc
 - Chlordane
 - Chloride
 - DDT
 - EPA Standards
 - pH
 - Salinity
 - Selenium
 - Target Ranges
 - Targets
 - Toxaphene

- III. Water Quality Actions**
 - General
 - Action Addition
 - Action Description
 - Action Prioritization
 - Dilution Actions
 - Integrated Pest Management
 - Land Retirement
 - Mercury
 - Problem Identification Process/CALFED RFP
 - Source Control
 - Source Control by Watershed Management
 - Storage of Agricultural Drainage
 - Toxicity
 - Treatment Actions

IV. Water Quality Projects

- General
- Permitting
- Projects
- Project Criteria
- Project Selection
- Watershed Projects

V. Water Quality Documents

CMARP

- Draft Framework of CMARP
- Interagency Ecological Program

Water Quality Component Report (August 6, 1997)

- General
- Coordination with Ecosystem Restoration Program Plan
- Salinity
- Executive Summary
- Executive Summary and Water Quality Problem Areas Section 5
- Introduction Section 1
- Background Section 2
- Parameters of Concern Section 3
- Parameters of Concern - Addition
- Sources and Loadings of Parameters Section 4
- Water Quality Problem Areas Section 5
- Existing Programs Section 6
- Action Strategies Section 7
- Action Strategies Section 7 Mine Drainage
- Action Strategies Section 7 Urban and Industrial Runoff
- Action Strategies Section 7 Wastewater and Industrial Discharges
- Action Strategies Section 7 Agricultural Drainage
- Action Strategies Section 7 Water Treatment
- Action Strategies - Addition
- Watershed Coordination Section 8
- Appendix C

Water Quality Affected Environment Report

- General
- Carbofuran, Chlorpyrifos
- Parameters of Concern
- Prioritization of Parameters of Concern
- Salinity

Phase II Alternative Description

- General
- Common Programs
- Water Quality Program
- Coordinated Watershed Approach
- Interagency Ecological Program
- Drinking Water Quality
- Drinking Water Regulations
- Bromide
- Actions
- Actions Strategies
- Performance Targets
- Dilution Actions
- Mine Drainage Actions
- No Action Element

Appendix B - May 13, 1997 Version

- General
- Actions
- Ammonia
- Indicators of Success
- Performance Measures
- Mine Drainage Actions
- Urban and Industrial Runoff Actions
- Wastewater and industrial Discharges Actions
- Agricultural Drainage Actions
- Water Treatment Actions
- Unknown Toxicity Actions
- Water Management Actions
- Appendix C

Role and Policy with Respect to San Joaquin River Water Quality Problems

- March 10, 1997 Version
- March 30, 1997 Version
- May 6, 1997 Version
- July 1, 1997 Version
- Date Unknown

WATER QUALITY PROGRAM



CALFED
BAY-DELTA
PROGRAM

DRAFT
Comments from CALFED Agencies
CALFED Water Quality Program

Topic	Comment	Person	Date	Response
General	I am concerned that millions of dollars will be spent, victory will be declared, and none or few of the problems will actually be solved. Establishment of an independent group is interesting. Concentrating on studies of process and long-term monitoring of conditions to assess any "fixes" attempted seems like a more fruitful course than rapidly spending a ton of money on what might work. I am concerned with integration between the four groups. The lack of linkage is disturbing.	Larry Brown, USGS	4/15/97	
General	I am concerned the SJVDIP is seeking to play a role in the evaluation of water quality projects for the San Joaquin Basin. I am disappointed that the SJVDIP has not progressed in its vision during the past 7 years. The approach being taken ignores the great strides being made in the Grasslands Bypass Project, our work in real-time water quality management of the San Joaquin River and many of the environmental commitments made since 1990, including CVPIA, ERPP and the entire CALFED initiative. Among the proposals you received for this round are some of the most progressive, forward-looking ideas that SJVDIP would do well to study and incorporate into their own program.	Nigel Quinn, USBR	8/19/97	
General	The Purpose and Need Statement approved by the CALFED Policy Group included a proper articulation of the goals for the drinking water quality program component. The Purpose and Need statement provides CALFED with ample appropriate methods and indicators to guide the long-term plan's improvements in source water quality for utilities. CALFED should, through its alternatives analysis, specify a reasonable level of source water quality improvement that would assist in compliance with many future outcomes, not to one regulatory outcome specifically correlated to one level of improvement.	Karen Schwinn, USEPA	9/30/97	
General	Will the write-up (for PEIS) look more like your process description or like actions?	Gail Louis, USEPA	1/23/97	Rick's response: We believe it will look more like our process.

DRAFT
Comments from CALFED Agencies
CALFED Water Quality Program

Topic	Comment	Person	Date	Response
General	If a standard exists but a problem potentially exists, do not throw it out of consideration without further study.	Jean Elder, USFWS	1/23/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> October 24, 1997: Comment noted.
General	The analyses must be accessible to the public.	Jean Elder, USFWS	1/23/97	CALFED response: Detailed information and studies will be included by reference.
General	CALFED will need a good recordkeeping system for locating documents.	Jean Elder, USFWS	1/23/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> October 24, 1997: Comment noted.
General	Change the words (on arrow slide from 1/23/97 PCT Ad-Hoc Meeting) to "dependent upon" programmatic.	Gail Louis, USEPA	1/23/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> October 24, 1997: Comment noted.
General	Will you be giving BDAC hand-outs of actions, etc.? May need to give them more information if you want meaningful input. It might help if you explain (to BDAC) the complications you are facing on issues so that they can provide meaningful input. If you give BDAC a list of actions they might tell you what they don't think should be included.	Gail Louis, USEPA	1/23/97	Rick's response: We weren't intending to.
General	Throughout the document there is use of popular terminology such as "ecosystem health." Defining these terms could avoid ambiguous interpretations and conflicts later in the process.	USBR	6/6/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> October 24, 1997: Comment noted.

D - 0 3 5 0 4 8

DRAFT
Comments from CALFED Agencies
CALFED Water Quality Program

Topic	Comment	Person	Date	Response
General	The level of detail provided in the Water Quality Technical report is recognized as being programmatic in nature, however, there remains a need to address certain key issues such as, the sources and fate of bromine, water use efficiency actions and their impact on water quality with a degree of specificity.	USBR	9/25/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> October 24, 1997: Water use efficiency is policy-oriented. The specificity which is requested is not possible at this level. The sources of bromide have been identified.
General	CALFED should address the difference and significance between what level of a constituent is detected and what is biologically available.	USBR	9/25/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> October 27, 1997: Comment incorporated into the October 31, 1997, version of the Affected Environment document.
General	We agree with the statement that DWRSIM may not sufficiently assess water quality impacts, however a adequate quantitative analysis can efficiently be done by hand - the choices are not just DWRSIM or qualitative.	USBR	9/25/97	
General	There is a need for input on the water quality program from those with expertise in aquatic life (specifically fish) impacts. The ClubFed group agreed to get USFWS and NMFS review of program and actions. A rating of the relative importance of pollutants is needed. The Recovery Plan for Sacramento/San Joaquin Delta Native Fishes does not answer the Water Quality Team's questions.	Ted Roefs, USBR	4/23/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> October 24, 1997: Comment noted.
General	Cay Goude (USFWS) also suggested that the program should be reviewed for consistency with winter-run and Delta native fish recovery plans, and appropriate biological opinions.	Cay Goude, USFWS	4/23/97	
General	The current configuration of the Delta is dependent upon levee stability. How do we combine flood control with other purposes (i.e., water quality, water supply, ecosystem restoration, etc.) To achieve CALFED Program goals? Dredging has strong links to other purposes in the Delta - in addition to navigation, dredging is a major factor in flood control, ecosystem restoration, and recreation.	Army Corps of Engineers	4/23/97	

DRAFT
Comments from CALFED Agencies
CALFED Water Quality Program

Topic	Comment	Person	Date	Response
General	There is an issue regarding seismic stability for Delta levees and the potential impacts on water quality due to earthquake-induced levee failure.	Larry Smith, USGS	4/23/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> October 27, 1997: Comment noted.
General	We agree with the comment response that CALFED documents should clearly explain the issues associated with evaporation ponds (e.g. Kesterson) and assume such an explanation will be provided in the EIR/EIS.	USBR	9/25/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 12/22/97: In the WQPP, water quality issues associated with Kesterson are mentioned in relation to agricultural drainage actions targeted at selenium.
General	Suggest CALFED consider water quality and flow conditions that are not founded on Decision 95-6. Variations in Delta configuration and operational approaches may in fact, negate or alter the need for specific water quality standards. There appears to be a need to describe the overall strategy or vision for the Delta and how water quality parameters will ultimately be incorporated into this strategy or vision.	USBR	9/25/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> October 27, 1997: The overall strategy will be addressed in the preferred alternative.
General	The water quality program should not just endorse the status quo with regard to San Joaquin drainage issues, it should go beyond existing programs.	Gail Louis, USEPA	4/23/97	
General	The drainage plan is intended to be a package and there are concerns that components are being split out which would change the outcome.	Jean Elder, USFWS	1/23/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> October 27, 1997: Comment noted.
Linkages Between Programs	One of the methods referenced to reduce the toxic effects of Agricultural Drainage includes increased water use efficiency. Clarifying the linkages between the two programs (water use efficiency and water quality) with specific examples (e.g., actions of practices) would allow the reader to evaluate the program in a more comprehensive manner.	USBR	6/6/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> October 27, 1997: Water use efficiency is a policy-level program.

D - 0 3 5 0 5 0

DRAFT
Comments from CALFED Agencies
CALFED Water Quality Program

Topic	Comment	Person	Date	Response
Linkages Between Programs	It is not clear how all the programs and reports mentioned on this page relate to one another. Nor is it clear from where and how (i.e., various ways) projects/studies or action items will be submitted to the WQTG. How were and who originated the "studies currently planned as part of the Common Water Quality Program"?	Victor de Vlaming <i>State Water Resources Control Board</i>	12/2/96	
Modeling	With regards to the modeling technical support team - it is important that any water quality models which are developed be thoroughly validated with real-life monitoring data.	Victor de Vlaming <i>State Water Resources Control Board</i>	12/2/96	
Modeling	Some stakeholders are questioning the validity of modeling.	Various Agencies, <i>ClubFed Retreat</i>	4/23/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> October 27, 1997: Comment noted.
Modeling	There is a possible need for the Storage & Conveyance Team to do modeling runs for specific water quality parameters (e.g., fate of bromides in the Delta).	Ted Roefs, <i>USBR</i>	4/23/97	
Research	Metals should be listed as a high priority research area since there is almost no information on toxicity of central Valley and Delta sediments on aquatic organisms.	Chris Foe, <i>CVRWQCB</i>	6/30/97	
Studies	Focused science will help improve the problems in this estuary. Physical restoration is a useless endeavor without improved water quality. Properly focused studies are necessary for cost-effective solutions.	Sam Luoma, <i>USGS</i>	4/11/97	

DRAFT
Comments from CALFED Agencies
CALFED Water Quality Program

Topic	Comment	Person	Date	Response
Studies	There continues to be a need for specific studies to address water quality concerns. A yield increase study that provide quantitative data and one that indicates changes to water quality are essential elements to the water quality program.	USBR	9/25/97	

D-035052

WATER QUALITY TARGETS



CALFED
BAY-DELTA
PROGRAM

DRAFT
Comments from CALFED Agencies
CALFED Water Quality Targets

Topic	Comment	Person/ Agency	Date	Response
General	Under footnote x, a clarifying sentence, namely H = In hardness should be added.	Carol Atkins <i>State Water Resources Control Board</i>	12/4/96	
Boron	For values on the San Joaquin River, see water quality objectives on page III-3.00 of the Basin Plan.	Chris Foe, Rudy Schnagel	11/21/96	
Boron	What is the rationale for not using the boron objective in the CVRWQCB Basin Plan?	Carol Atkins <i>State Water Resources Control Board</i>	12/4/96	
Bromide	The listed target value for bromide is inappropriately stringent for evaluation of CALFED alternatives. We suggest a range for bromide from 100 to 200 $\mu\text{g/l}$. We recommend that a range for total organic carbon (TOC) be used from 2 to 4 mg/l. Given the likely Stage 1 Disinfectants/Disinfection Byproduct Rule requirements and current treatment options, water in these quality ranges should generally be able to be treated to meet standards.	Karen Schwinn, <i>USEPA</i>	9/30/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> October 27, 1997: Comment incorporated into the October 31, 1997, version of the Affected Environment document for review by Water Quality Technical Group on December 3, 1997.
Bromide	The water quality documents use CUWA's judgement on the appropriate bromide water quality goal to minimize utility treatment costs and maximize their treatment flexibility. It is not apparent to me that this value, 50 $\mu\text{g/L}$, should be used as a benchmark to evaluate the various alternatives: A value of 100 $\mu\text{g/L}$ or higher is legitimate and the use of a range, perhaps from 50 - 150 $\mu\text{g/L}$, is desirable. There is no absolute "drop-dead" value. Many if not most utilities will be able to comply with the upcoming bromate MCL at current bromide levels.	Bruce Macler, <i>USEPA</i>	7/24/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> October 27, 1997: Comment incorporated into the October 31, 1997, version of the Affected Environment document for review by Water Quality Technical Group on December 3, 1997.

DRAFT
Comments from CALFED Agencies
CALFED Water Quality Targets

Topic	Comment	Person/ Agency	Date	Response
Cadmium, Copper, Zinc	It is not clear where the ranges for cadmium - below Hamilton City, cadmium-San Joaquin River, cadmium-Delta, copper-San Joaquin River, and Zinc-San Joaquin River.	Carol Atkins <i>State Water Resources Control Board</i>	12/4/96	
Cadmium, Copper and Zinc	Under footnote c, the hardness equations for cadmium, copper and zinc appear to be written incorrectly. Namely, the subtraction should occur in the superscript of the exponential and multiplication should be by 10 to the minus 3 power. The equations should read as follows: $\text{Cu} = e^{(0.905)(\ln \text{hardness} - 1.612)} \times 10^{-3}$ $\text{Zn} = e^{(0.830)(\ln \text{hardness} - 0.289)} \times 10^{-3}$ $\text{Cd} = e^{(1.160)(\ln \text{hardness} - 5.777)} \times 10^{-3}$	Carol Atkins <i>State Water Resources Control Board</i>	12/4/96	
Chlordane	Basin Plan says no detectable chlorinated hydrocarbons in water. Please change.	Chris Foe, Rudy Schnagel	11/21/96	
Chloride	State Board has salinity objectives for delta waters.	Chris Foe, Rudy Schnagel	11/21/96	
DDT	Basin Plan says no detectable chlorinated hydrocarbons in water. Please change.	Chris Foe, Rudy Schnagel	11/21/96	
EPA Standards	It is not clear what "general EPA guidelines" means. The Federal Register (May 4, 1995) standards are applicable nationwide, while the Great Lakes criteria are currently only applicable to Great Lakes states. There, however, does not seem to be a reason why the recalculated criteria should not be considered for acceptable ranges.	Carol Atkins <i>State Water Resources Control Board</i>	12/4/96	

DRAFT
Comments from CALFED Agencies
CALFED Water Quality Targets

Topic	Comment	Person/ Agency	Date	Response
pH	There are objectives in the Basin Plan.	Chris Foe, Rudy Schnagel	11/21/96	
Salinity	State Board has salinity objectives for delta waters. See agriculture and other uses in Basin Plan, Table III-5 for Sacramento and San Joaquin Rivers.	Chris Foe, Rudy Schnagel	11/21/96	
Selenium	The water quality objectives for North and South of the Merced River on the San Joaquin River are not final. They are subject to Office of Administrative Law (OAL) approval. Approval by the OAL is expected within the next few weeks.	Chris Foe, Rudy Schnagel	11/21/96	
Target Ranges	Some target ranges may be desirable but not attainable. This should be expressed to BDAC.	Ted Roefs, USBR	1/23/97	
Target Ranges	Where did the target ranges come from?	Gail Louis, USEPA	1/23/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> Rick's response: The Basin Plans and a variety of other sources (e.g., Ayers and Westcott, CUWA, etc.).
Targets	Regarding the December 18, 1996, Memo on Water Quality, I do not see the utility of listing 0.7 EC as a target for agricultural water quality. In areas where water quality is worse than this, it would take heroic measures such as desalting or building a San Joaquin Valley drain to make significant improvements.	Ted Roefs USBR	1/7/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> October 27, 1997: Comment noted.
Targets	The sources for the target levels in the Water Quality Programmatic Actions should be reflected in the program.	USEPA	4/23/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> October 27, 1997: Comment noted.

DRAFT
Comments from CALFED Agencies
CALFED Water Quality Targets

Topic	Comment	Person/ Agency	Date	Response
Targets	Regional Board Basin Plan objectives were adopted as targets for parameters of concern (where available). Some stakeholders have raised questions regarding the science behind these objectives and the appropriateness of using them as targets for the water quality program.	Various Agencies, <i>ClubFed Retreat</i>	4/23/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> October 27, 1997: Comment noted.
Toxaphene	Basin Plan says no detectable chlorinated hydrocarbons in water. Please change.	Chris Foe, Rudy Schnagel	11/21/96	

D-035057

WATER QUALITY ACTIONS



CALFED
BAY-DELTA
PROGRAM

DRAFT
Comments from CALFED Agencies
CALFED Water Quality Actions

Topic	Comment	Person/ Agency	Date	Response
General	It is ecologically stupid to wait until there are killoffs before remediation action is taken. In ecosystem after ecosystem there are those who want to see a lot of dead bodies before consideration of corrective actions. If we are to have healthy ecosystems we have to move into an era of proactive protection. Best scientific judgement should carry some weight. We will never have 99% or 100% certainty about contaminant effects.	Vic DeVlaming SWRCB	4/25/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 11/21/97: Comment noted.
General	Why do we attempt to prevent pollution if no actions will be taken until significant population declines are validated? There are several cases of pollution where, in many scientists opinions, there is enough evidence (not 99 to 100 % sure, but 85 % or so) for corrective action. We can never be completely sure about anything. There are potential pollution problems where there is not enough information to act on, but we have enough evidence to take action to reduce the offsite movement of OP pesticides.	Vic DeVlaming SWRCB	4/25/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 11/21/97: Comment noted.
General	CALFED has a mandate to take action to improve conditions based on an understanding of all the research of the past 15 years or so. CALFED needs to take action based on what we already know. From the comments sent in, it would seem that we do not know much and have to develop an expensive, comprehensive program to start a crack at knowledge. I doubt this is true. Do Contaminant PWT members need to develop a "know" vs. "do not know" list that CALFED can base its actions on? Hasn't this already been done by the old Aquatic Habitat Institute in the mid 1980's? Is that work no good or does it simply need to be reviewed and updated?	Leo Winternitz, DWR	4/18/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 11/21/97: Comment noted.
General	There is not full agreement amongst the Water Quality Technical Group on the feasibility, effectiveness and appropriateness of all the actions contained in the water quality common program.	Ted Roefs, USBR	4/23/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 11/21/97: A Water Quality Implementation Plan will be developed as part of Phase III of CALFED. The Plan will provide greater specificity on actions, identify a mechanism for prioritization, and identify implementing entities.

DRAFT
Comments from CALFED Agencies
CALFED Water Quality Actions

Topic	Comment	Person/ Agency	Date	Response
General	There is difficulty in connecting the solutions proposed to the goals of the process. Science does not exist to warrant the expenditure of resources that may be made. More specific scientific expertise to each of the measures should be considered a high priority. Do we know enough about the science to say that the action will have the desired effect? The water quality committee is a mixture of technical expertise and stakeholder interests. The committee should be thinking about how to bring more specific scientific expertise to each of the measures being considered as high priority. There may not be enough knowledge to evaluate the proposed measure and, if so, the action should not be characterized as "high priority."	Ted Roefs USBR	1/7/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 11/21/97: Comment noted. We agree that we are in the Programmatic stage and not yet prioritizing actions. CMARP and the Implementation Plan are going to play an important role developing the tools to evaluate the proposals for effectiveness and priority. A prioritization scheme will be identified in the Water Quality Implementation Plan
General	I recommend development of agricultural practices which reduce or eliminate the use of pesticides which tend to move off-site. Where the use of pesticides is essential, I recommend development of practices which reduce or eliminate off-site movement of pesticides.	Victor DeVlaming SWRCB	4/20/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 12/19/97: Best management practices and pilot scale testing to control pesticides in agricultural runoff are included within the agricultural drainage actions.
General	Habitat corridors and endangered species issues need to be considered in addition to pollutant (i.e., selenium) loadings.	Cay Goude, USFWS	4/23/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 11/21/97: Comment noted. Habitat corridors associated with endangered species are outside the focus of the Water Quality Program. The Ecosystem Restoration Program Plan addresses endangered species habitat.
General	One of the actions calls for seasonal wetlands by flooding agricultural lands for several months in winter and early spring. Studies need to be done to verify that pesticide residues do not cause adverse impacts on the seasonal wetlands.	Jerry Bruns, CVRWQCB	7/29/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 11/21/97: The action has been removed from the Water Quality Program Plan.

DRAFT
Comments from CALFED Agencies
CALFED Water Quality Actions

Topic	Comment	Person/ Agency	Date	Response
Action Addition	An action for mining and urban specific to mercury should be added to the list.	Chris Foe, CVRWQCB	12/5/96	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 12/19/97: Actions in the Water Quality Program Plan for urban and industrial runoff address copper, cadmium, zinc, chlorpyrifos, diazinon, oxygen depletion, sediment, total organic carbon, salinity and pathogens.
Action Addition	Add an action for sediment transport into major reservoirs. Look at ways to decrease sediment transport into reservoirs so that the longevity of the dam and reservoir is maintained.	Chris Foe, CVRWQCB	12/5/96	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 12/19/97: It is unclear how sediment transport into reservoirs affects water quality in the Bay-Delta.
Action Description	There is a problem with the way water quality subject areas are stated. The statement "Reduction of..." implies that the problem and how to fix it is understood. We do not adequately understand the significance of some of the problems and the simple "just quit discharging it" fix is rarely a feasible option nor will it withstand public scrutiny.	Sam Luoma, USGS	4/11/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 11/21/97: Comment noted. We are currently assessing problems at a programmatic level. We agree more information is needed to define the extent of problems and the methods to solve the problems. CMARP and the Implementation Plan will more specifically define problems and long-term implementation goals.
Action Description	For pesticide reduction by source control, include the SWRCB in points #5, 6, and 7.	Victor de Vlaming State Water Resources Control Board	12/2/96	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 12/19/97: Comment no longer applicable to the Water Quality Program Plan.

DRAFT
Comments from CALFED Agencies
CALFED Water Quality Actions

Topic	Comment	Person/ Agency	Date	Response
Action Descriptions	<p>I believe actions would be better stated like the following, in order to generate the most creative studies:</p> <ol style="list-style-type: none"> 2. Establish the ecosystem significance of the pesticides Chlorpyrifos, Carbofuran, and Diazinon in the Sacramento and San Joaquin Rivers and Delta; verify the important sources among the surface agricultural discharges from the significant sources. 3. Establish the significance of pollutant inputs from urban storm runoff to the Delta and Bay, especially considering Diazinon and Chlorpyrifos, nutrients, salinity, dissolved oxygen, turbidity, PAH's and metals. Verify which of the pollutants create the greatest threat to significant species, establish which sources of urban runoff are the most important, and develop, test and monitor cost-effective mechanisms to reduce the most significant discharges. 4. Determine if reduction of copper, zinc, and cadmium inputs from abandoned an inactive mines into Sacramento River above Hamilton City would be effective in improving the survival of critical species in the Sacramento River, Delta and North Bay ecosystems. Reduce inputs at paces and times that would improve the survival of critical species. 5. Establish the significance of selenium from subsurface agricultural drainage in the Grasslands area to the welfare of the ecosystems of the San Joaquin River, the Delta and North San Francisco Bay. Establish the relative importance of other sources of selenium including internal sources from historic contamination, and establish which species are most threatened by existing or possible future contamination. Use this knowledge to determine how to most effectively remove the selenium threat to the critically affected species in the Delta ecosystem. 6. Coordination of watershed water quality activities related to toxic contaminant reduction and development of watershed-wide solutions to water quality problems affecting the ecosystem. 7. Establish the significance of the several possible sources of mercury contamination in impaired water bodies, as defined through the CALFED Water Quality Program; consider and compare inputs from specific abandoned and inactive mines, gold mining activities and internal cycling as possibilities. Determine which of the critical species in the Bay ecosystem (or which resources) are most threatened by mercury contamination and develop a cost-effective program that reduces mercury contamination and threats to these species by attacking the most significant sources of the problem. 	Sam Luoma, USGS	4/11/97	<p><i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i></p> <p>11/21/97: Presently, actions are being addressed at a programmatic level without attaching significance or priority. The stakeholder process is being carried out to ensure that all interests are being addressed. Prioritization and significance will be determined through the development of CMARP and the Implementation Plan.</p>

D - 0 3 5 0 6 2

DRAFT
Comments from CALFED Agencies
CALFED Water Quality Actions

Topic	Comment	Person/ Agency	Date	Response
Action Prioritization	I want to emphasize the importance of keeping Action Items #31, 11, and 32 in the priority list. For the SWRCB, these are extremely critical actions which our budget cannot currently cover.	Victor de Vlaming <i>State Water Resources Control Board</i>	12/2/96	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as: 12/19/97: A mechanism for prioritizing actions will be developed as part of the Water Quality Implementation Plan.</i>
Action Prioritization	I want to emphasize the importance of keeping Action Items #31, 11, and 32 in the priority list. For the SWRCB, these are extremely critical actions which our budget cannot currently cover.	Victor de Vlaming <i>State Water Resources Control Board</i>	12/2/96	

D-035063

DRAFT
Comments from CALFED Agencies
CALFED Water Quality Actions

Topic	Comment	Person/ Agency	Date	Response
Dilution Actions	We disagree with the reasoning to retain dilution actions as part of the water quality program. If any of the CALFED alternatives cause increased salinity problems in specific areas, then actions to "mitigate" these impacts should be integrated into that particular alternative, not as part of the common program that bridges <u>all</u> alternatives. We disagree that this action should be retained merely because it originated from stakeholder input. The inclusion of these three actions is appropriate for CALFED Management Team discussion.	Karen Schwinn, USEPA	9/30/97	<p>1/23/98: Response from Rick Woodard to Judy Heath indicating: "The Water Quality Technical Group considered dilution as a means of improving water quality problems. The consensus of the group was that dilution is generally an inappropriate means of achieving water quality objectives and, indeed, may not be legally permissible in many circumstances. Accordingly, CALFED does not plan to undertake actions for the primary purpose of diluting concentrations of pollutants. However, CALFED does recognize that actions that are justified for the primary purpose of achieving other CALFED objectives may result in consequential water quality benefit as a result of dilution. In consideration of such actions, CALFED will take into account the consequential benefits that dilution would achieve if the action is fully justified to serve its primary purpose.</p> <p><i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 11/21/97: Follow-up action: Judy Heath will discuss with Rick Woodard. 12/15/97: Forwarded fax to Judy Heath requesting outcome of her discussion with Rick Woodard.</p>

DRAFT
Comments from CALFED Agencies
CALFED Water Quality Actions

Topic	Comment	Person/ Agency	Date	Response
Dilution Actions	We have concerns over actions regarding acquiring water for dilution - this may be a violation of State Board's unreasonable use doctrine and federal law.	Jean Elder, Jim McKevitt, USFWS	4/23/97	<p>1/8/98: Forwarded hard copy and electronic copy of draft fax cover sheet to Judy Heath regarding the unreasonable use</p> <p>1/23/98: Response from Rick Woodard to Judy Heath indicating:</p> <p>"The Water Quality Technical Group considered dilution as a means of improving water quality problems. The consensus of the group was that dilution is generally an inappropriate means of achieving water quality objectives and, indeed, may not be legally permissible in many circumstances. Accordingly, CALFED does not plan to undertake actions for the primary purpose of diluting concentrations of pollutants. However, CALFED does recognize that actions that are justified for the primary purpose of achieving other CALFED objectives may result in consequential water quality benefit as a result of dilution. In consideration of such actions, CALFED will take into account the consequential benefits that dilution would achieve if the action is fully justified to serve its primary purpose.</p> <p><i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i></p> <p>11/21/97: Follow-up action needed. Contact Jean and ask for explanation of comment.</p> <p>12/15/97: Draft fax to Jean Elder was forwarded to Judy Heath for review and approval regarding the unreasonable use doctrine and federal law.</p>

D - 0 3 5 0 6 5

DRAFT
Comments from CALFED Agencies
CALFED Water Quality Actions

Topic	Comment	Person/ Agency	Date	Response
Integrated Pest Management (IPM)	The implementation of Integrated Pest Management in surface drainage source areas will reduce pesticide loads to the Delta but since some of these pesticides have been determined to be toxic to test organisms at some times and places, there may be no effect on species important to ecosystem health. There is difficulty in connecting the solutions proposed to the goals of the process. Science does not exist to warrant the expenditure of resources that may be made. More specific scientific expertise to each of the measures should be considered a high priority.	Ted Roefs USBR	1/7/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 11/21/97: In response to stakeholder comments, Integrated Pest Management has been removed from the document.
Integrated Pest Management (IPM)	Incentives other than financial (e.g. good stewardship) should be included in this action item.	Victor de Vlaming State Water Resources Control Board	12/2/96	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 11/21/97: In response to stakeholder comments, Integrated Pest Management has been removed from the Water Quality Program Plan.
Land Retirement	CALFED is using land retirement as a tool to address only water quality issues, and not for endangered species recovery. Land retirement in San Joaquin can have water quality, water supply and habitat benefits.	Cay Goude, USFWS	4/23/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 11/21/97: Comment noted. In accordance with CALFED policy, land retirement and land fallowing have been removed from the document.

DRAFT
Comments from CALFED Agencies
CALFED Water Quality Actions

Topic	Comment	Person/ Agency	Date	Response
Mercury	To my knowledge, mercury is not present in the Central Valley or Delta at concentrations that causes aquatic ecological damage. It is a human health consumption problem as a result of bioaccumulation in long lived fish. I strongly support the inclusion of mercury into the water quality action list. Elevated mercury levels were recently reconfirmed in several commonly caught fish in San Francisco Bay. Data is needed to affirm the problem still exists in the Delta, the sources, the bioavailability of various sources, and whether reduction of loads would reduce fish tissue levels. Caution should be exercised in building shallow water/ marsh habitats to methylate mercury to prevent a situation similar to Kesterson.	Chris Foe, CVRWQCB	4/22/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 12/19/97: Monitoring needed for mercury and the problems associated with methylation of mercury are addressed in the Water Quality Program Plan.
Problem Identification Process/ CALFED RFP	Pesticides in agricultural and urban runoff, metals in the Sacramento River, and selenium in the San Joaquin River were included in the action list because they were known to exceed Basin Plan numerical or narrative objectives. This only makes them candidates for causing ecological impact. Objectives have built in safety factors; however, exceedances of water quality objectives have traditionally been sufficient to trigger remediation. A higher standard of evidence which shows that the chemicals are actually demonstrated to cause population changes to species of concern should be achieved before CALFED money is expended for remediation. It is a CALFED management call to establish how much evidence is required before remediation money is spent. If additional evidence is advisable, the early implementation RFP should include collecting scientific evidence that the chemicals cause ecological damage and identification of treatment options.	Chris Foe, CVRWQCB	4/22/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 11/21/97: Comment noted. CALFED is not a regulatory body. As such, it relies on the expertise of agencies regulating water quality to establish water quality objectives. The program has developed water quality targets based on Basin Plan numbers, USEPA objectives and other science-based standards. These water quality targets are viewed and updated as appropriate by the CALFED Water Quality Technical Group and Parameter Assessment Team.

DRAFT
Comments from CALFED Agencies
CALFED Water Quality Actions

Topic	Comment	Person/ Agency	Date	Response
Problem Identification Process/ CALFED RFP	Include other subject areas such as selenium concentrations in Protomocorbula, sturgeon and diving ducks in Suisun Bay which are high enough to pose a potential ecosystem health problem. TIE's should be included in the RFP because their results may become the CALFED actions of tomorrow. The CALFED monitoring plan is due to be released in early June. Maybe the RFP should wait until the release of the CALFED monitoring plan before calling for additions to it.	Chris Foe, CVRWQCB	4/22/97	1/8/98: Forwarded hard copy and electronic copy of draft fax cover sheet to Judy Heath. <i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 11/21/97: Comment noted. Follow-up action needed. Request sources of information to enable citations in report. 12/15/97: Drafted fax to Chris Foe and forwarded to Judy Heath for her review and approval.
Source Control	The Bureau would like to see more source control and less dilution as a solution.	Jean Elder, USFWS	1/23/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> October 27, 1997: Comment noted.
Source Control by Watershed Management	This action should be coordinated and integrated with source control of pesticides and financial incentives for IPM for agriculture.	Victor de Vlaming State Water Resources Control Board	12/2/96	
Source Control by Watershed Management	Outreach must be a component of this action item. See my comments on outreach under source control for pesticides. Alternative practices have little or no potential for success unless interested and affected parties comprehend that current practices are resulting in water quality problems. At this time, affected parties do not have this comprehension.	Victor de Vlaming State Water Resources Control Board	12/2/96	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 11/21/97: Watershed coordination activities are being undertaken by CALFED. These activities include meeting directly with watershed stakeholders in the upper watersheds.

D-035068

DRAFT
Comments from CALFED Agencies
CALFED Water Quality Actions

Topic	Comment	Person/ Agency	Date	Response
Storage of Agricultural Drainage	Disagree with drainage storage, pointing out that Kesterson was conceived for this purpose.	Ted Roefs, Bureau of Reclamation	12/4/96	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 12/19/97: The problems associated with Kesterson have been noted in the WQPP.
Toxicity	It is toxicity testing which has and will determine compliance with Regional Water Quality Control Board toxicity water quality standards. It is TIEs which have been and will be successful in identifying the chemical causes of toxicity in toxic water quality samples.	Victor de Vlaming State Water Resources Control Board	12/2/96	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 12/19/97: Toxicity identification evaluations are one type of toxicity test included as an indicator of success in the Water Quality Program Plan.
Toxicity	Toxicity tests are the only relatively rapid integrative measure of all directly acting toxic chemicals in a water sample. All other tests/measures are chemical specific (i.e., do not measure additivity). Toxicity tests are the only measure of aquatic organism response to water samples and the only means of measuring bioavailability of chemicals.	Victor de Vlaming State Water Resources Control Board	12/2/96	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 12/19/97: Toxicity identification evaluations are one type of toxicity test included as an indicator of success in the Water Quality Program Plan.
Toxicity	It is imperative that this action item be a high priority so that improvements (or further degradation) in water quality due to actions taken be assessed.	Victor de Vlaming State Water Resources Control Board	12/2/96	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 12/19/97: A Water Quality Implementation Plan will be developed as part of Phase III of CALFED. The Plan will provide greater specificity on actions, identify a mechanism for prioritization, and identify implementing entities.
Toxicity	Toxicity testing should be focused on testing specific hypotheses. Also need to take into account available methodologies.	Ted Roefs, Bureau of Reclamation	12/4/96	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 12/19/97: Toxicity identification evaluations are one type of toxicity test included as an indicator of success in the Water Quality Program Plan.

DRAFT
Comments from CALFED Agencies
CALFED Water Quality Actions

Topic	Comment	Person/ Agency	Date	Response
Treatment Actions	It is still unclear what is meant by "reducing pollutants in water diverted from the Delta" and the purpose of such a reduction. This section relates to treatment actions, please describe the proposed level of treatment.	USBR	9/25/97	<p><i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i></p> <p>12/20/97: The statement has been reworded in the WQPP to facilitate the reader's understanding.</p>

D-035070

WATER QUALITY PROJECTS



CALFED
BAY-DELTA
PROGRAM

DRAFT
Comments from CALFED Agencies
Water Quality Projects

Topic	Comment	Person/ Agency	Date	Response
General	What is the 5-year implementation plan based on? Won't there be projects that are tied to storage and conveyance?	Jean Elder, <i>USFWS</i>	1/23/97	CALFED Response: 5-year plan is based on known funding sources.
Permitting	Permit Streamlining: CALFED has developed a proposed process for streamlining permitting and environmental review of ecosystem restoration projects proposed for early implementation. To implement the proposal effectively, all agencies with review and approval authority will need to support this process. One of the principal considerations is the staffing commitment which would be required. While the process coordinates project permitting and review, it may necessitate additional agency resources.	<i>Army Corps of Engineers</i>	4/23/97	
Projects	Project designs to improve water quality should include 1) monitoring for toxicity, 2) Toxicity Evaluations, and 3) chemical analyses to assess exceedances of water quality criteria, guidelines, or standards.	Victor DeVlaming <i>State Water Resources Control Board</i>	4/20/97	
Project Criteria	One of the criteria for assessment of a proposal should be that it focuses on a geographic area that is considered important by the habitat group, etc.	Larry Brown, <i>USGS</i>	4/15/97	
Project Criteria	The Board recommends using the following criteria for the early selection of projects: <ul style="list-style-type: none"> • Projects that employ partnerships should be given higher priority. • Projects that develop a sustained process, rather than a one-time fix, should be given higher priority. • Projects that provide a regional, rather than local, water quality benefit should be given higher priority. 	Jerry Bruns <i>Regional Water Quality Control Board</i>	3/4/97	
Project Criteria	Maybe you should mention stakeholder involvement concerning criteria at a programmatic and project level.	Gail Louis, <i>USEPA</i>	1/23/97	

DRAFT
Comments from CALFED Agencies
Water Quality Projects

Topic	Comment	Person/ Agency	Date	Response
Project Selection	The proposals that PWT approved should be funded by CALFED. The proposals are sound proposals which address the critical issue of whether contaminants have negative impacts on aquatic populations of the Sacramento/San Joaquin system. The intent of PWT was to offer up sound proposals which provide some insight into the contaminant-aquatic populations relationship. Our proposals do that.	Vic DeVlaming SWRCB	4/17/97	
Watershed Projects	The Selenium Total Maximum Monthly Load for the San Joaquin River is not really a watershed program.	Joe Karkowski USEPA	12/31/96	
Watershed Projects	The San Joaquin NAWQA Program is not really a watershed program because there is no stakeholder involvement.	Joe Karkowski USEPA	12/31/96	
Watershed Projects	The Salinity Management Program for the San Joaquin River may not have begun yet.	Joe Karkowski USEPA	12/31/96	

WATER QUALITY DOCUMENTS



CALFED
BAY-DELTA
PROGRAM

D - 0 3 5 0 7 4

D-035074

DRAFT
Comments from CALFED Agencies
CMARP

Topic	Comment	Person/ Agency	Date	Response
Draft Framework of CMARP	As I understand, CALFED will appoint a staff member to be a monitoring assessment and research czar ostensibly for the Bay-Delta estuary and tributary watersheds. Using other agencies/entities to implement the program elements, the czar/manager will direct and modify, as needed on an annual basis the monitoring, research and assessment program. The program will only focus on those elements that directly support the CALFED program. Based on this description, I expect CALFED will be providing the necessary budgetary resources on a permanent basis to have the program conducted. Is this assumption wrong?	Leo Winternitz, DWR	8/7/97	Rick's Response - 8/15/97: Specific discussion of a management structure for the program will involve the CALFED agency staffs and their managements. The purpose of mentioning a management structure in this document was to call attention to the need for an overall coordinating role if the envisioned program is to be competently managed. We are viewing this requirement as one aspect of the job description. Use in this document of language such as "CALFED will" must be understood as a shorthand for whatever implementing structure arises from the CALFED process. It is important to this discussion to distinguish between program coordination as compared to program direction by a single individual. It seems unlikely that appointment of any single individual to set program direction would be an acceptable management approach. On the contrary we anticipate that, while CALFED agencies and other entities will have responsibilities for implementing the activity, it is really the stakeholders and citizens of California who must be satisfied with the result. Therefore, not only should there not be a single individual setting program direction unilaterally, neither should the management structure be perceived to be a small "cabal" of agency staff members. If this activity is to be successful, there needs to be broad based ownership on the part of the stakeholders. The needed ownership in the program will occur though the involvement of groups such as regional water quality assessment cooperatives, watershed management groups, regulatory agencies, the regulated community, and others such as citizen volunteers. If the management structure that is ultimately adopted is consistent with this vision, it follows that coordination of the efforts of the disparate participants will present special challenges that will need to be met through a strong coordination function.

DRAFT
Comments from CALFED Agencies
CMARP

Topic	Comment	Person/ Agency	Date	Response
Draft Framework of CMARP	Second page, first paragraph: Each year the program manager will publish a plan for the monitoring, evaluation and research to be conducted the following year. Based on my experience, this is a lot of work. I suggest either three or five year plans be developed. Plans could be reviewed annually to ensure they contain relevant program objectives.	Leo Winternitz, DWR	8/7/97	
Draft Framework of CMARP	Second page, first bullet: It is stated that "Only the assessments required in direct support of the CALFED program will be included within CMARP." I am unsure what this statement means. CMARP will be directing other agencies to implement the program. These agencies may have additional mandates or missions that need to be taken into consideration. Thus, the need for not only a comprehensive program, but also one that is coordinated and integrated. If CALFED covers the additional budgetary considerations of these agencies to do specified CALFED work, they can focus solely on CALFED program needs. An example of another mandate/mission is D-1485 monitoring. DWR and USBR, under the auspices of the IEP currently conduct this work. Unless water right permits are modified, this work will have to continue in addition to meeting other CALFED needs. CMARP assessment activities may need to be coordinated, collaborated, and where feasible and practical, integrated.	Leo Winternitz, DWR	8/7/97	Rick's response - 8/15/97: Many agencies and other entities are involved in the CALFED process in one way or another. Whether these be CALFED agencies or other groups, each has its unique mission and objectives. While the CALFED process should undertake to help coordinate and integrate these activities consistent with CALFED objectives, it must also be true that CALFED does not necessarily share all of the missions and objectives of its participants. To avoid dilution of limited CALFED resources, funding through the CALFED program should be limited to those activities that directly support the CALFED mission and objectives. There is the intention that necessary budgetary resources for work to be undertaken in pursuit of CALFED objectives over the next two or three decades be provided through State and Federal funding sources. It appears likely that activities such as those you mentioned would be melded into the CALFED implementation program in some way.

DRAFT
Comments from CALFED Agencies
CMARP

Topic	Comment	Person/ Agency	Date	Response
Draft Framework of CMARP	It is stated that CMARP will be implemented beginning with approval of 1997 Category III projects. How is CMARP being implemented with relation to Category III? How does this implementation relate to CMARP as described in the draft document? Is it a little premature to start implementing CMARP based on a draft document that has not yet been thoroughly reviewed or commented on by various parties?	Leo Winternitz, DWR	8/7/97	Rick's Response - 8/15/97: As you are aware, Category III project funding will be underway very soon. We believe that, although it will take some time to fully develop the CMARP, Category III project development should include consideration of quality assurance/quality control design, standardized methodology, standardized electronic data structures, and other aspects of what will ultimately become the CMARP, and which are necessary to enable the information to be effectively used. An interim program will help assure the value of the investments made through the Category III process and will prove critically important to the longer term credibility of the CALFED program. It will certainly be a challenge to get adequate provisions in place for Category III while developmental work on the full program is ongoing. Still, it is our contention that we can ill afford not to have at least a rudimentary program in place to protect these early investments.
Draft Framework of CMARP	It is stated CALFED's program manager will have final decision making authority concerning the content of the program, program budget, fiscal control and will assure accountability of program participants. This is very strong authority that should be backed up with adequate budgets and other incentives for agencies/entities to participate in and implement the program.	Leo Winternitz, DWR	8/7/97	Rick's Response - 8/15/97: At the August 6 meeting of the Water Quality Technical Group, it was specified that the term "Annual" was not intended to be read literally, but to suggest the need for periodic evaluation, at intervals that are appropriate, and redesign of the program as needed to assure that it efficiently pursues its objectives.
Draft Framework of CMARP	First page, last bullet: It is stated that the emphasis on CMARP is not on data collection but on data evaluation and use. I would suggest CMARP place equal emphasis on all three aspects. Poor data collection methods and techniques will result in mistaken data evaluation and erroneous use.	Leo Winternitz, DWR	8/7/97	Rick's Response - 8/15/97: There was not an intention to suggest that data collection is not critically important; rather, the intent was to emphasize that, whereas some historical monitoring programs have had the reputation of being strong on data collection and weak on data evaluation and interpretation, the full value of this program will be attained though heavy emphasis on appropriate use of the data collected.

DRAFT
Comments from CALFED Agencies
CMARP

Topic	Comment	Person/ Agency	Date	Response
Draft Framework of CMARP	First page, first paragraph: Does this development of a robust management structure include the development of budgetary program to secure and distribute funds to conduct the work?	Leo Winternitz, DWR	8/7/97	Rick's Response - 8/15/97: An Implementation Plan for the CALFED program will be developed that will recommend the necessary budgetary program for this and the other implementation activities of CALFED.
Draft Framework of CMARP	I thought CMARP was supposed to, instead of focusing on control, focus on how best to develop a coordinated monitoring and research program that results in informative assessments taking into consideration the needs of CALFED as well as the needs and mandates of other state and federal agencies. CMARP was to be the tool to bring the various agencies and other entities that conduct monitoring and research in the estuary together to develop a comprehensive and coordinated program. I do not see how that will be done based on the draft description.	Leo Winternitz, DWR	8/7/97	
Interagency Ecological Program	The Interagency Ecological Program (IEP) is charged with water quality monitoring in the San Francisco Bay-Delta. In the Phase II Alternatives Descriptions, it is important to include a description of how IEP will be involved with CALFED's Comprehensive Monitoring Assessment and Research Plan. (See also: Phase II Alternatives Comments).	USBR	6/6/97	

DRAFT
Comments from CALFED Agencies
Water Quality Component Report (August 6, 1997)

Topic	Comment	Person/ Agency	Date	Response
General	The Department of Fish and Game supports the CALFED process and goals, however, it cannot support items suggested in the Component Report that are contrary to previously adopted positions absent any new information demonstrating a need to change through prescribed formal processes (e.g., suggestion in the report relating to objectives for metals contained in the basin plan for the CVRWQCB in the Sacramento River salmon and steelhead spawning areas).	DFG - North Coast Region	9/10/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> October 24, 1997: Objectives for parameters of concern were reached through stakeholder involvement and use of the basin plan objectives. In light of the potential differences of opinion relating to the objectives, the Parameter Assessment Team was formed in order to reach consensus. Prepared follow-up response for October 30, 1997, for review by Rick Woodard.
General	A more thorough discussion of coordination with the CALFED water quality program and with other programs in the solution area, especially San Francisco Bay, is needed. Coordinating scientific and environmental management programs throughout a watershed and adjacent areas is especially important for water quality management. Freshwater flows through the Delta, and thus water management actions, affect water quality in central and south San Francisco Bay. The report should give a more complete description of the integration of the CALFED water quality program with existing and proposed water quality programs in the Sacramento River watershed, San Joaquin River watershed and San Francisco Bay. A more complete discussion of the coordination and integration of Water Quality and Ecosystem Restoration programs should be provided.	USFWS	9/5/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> October 24, 1997: Integration of the Programs will be associated with the CMARP framework.

DRAFT
Comments from CALFED Agencies
Water Quality Component Report (August 6, 1997)

Topic	Comment	Person/ Agency	Date	Response
General	A more thorough discussion coordinating the CALFED water quality program with other water quality programs in the solution area, especially San Francisco Bay, is needed. Coordinating scientific and environmental management programs throughout a watershed and adjacent areas is especially important for water quality management. Freshwater flows through the Delta, and thus water management actions, affect water quality in central and south San Francisco Bay (Nichols et al 1986, Science 231: 567-573). The report should give a more complete description of the integration of the CALFED water quality program with existing and proposed water quality programs in the Sacramento River watershed, San Joaquin River watershed, and San Francisco Bay.	Wayne White, USFWS	10/27/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 12/10/97: Draft response prepared and forwarded to Judy Heath stating the following: Coordination of the CALFED Water Quality Program with other water quality programs in the area is important to ensure the best use of limited resources. Section 3 of the August 6, 1997 Water Quality Component Report contains a brief description of eleven federal, state, and regional monitoring programs for water quality, tissue, and sediment quality. This section has been updated in response to additional information received since August 6, 1997 and is reflected in the latest version of the Water Quality Affected Environment Technical Report which contains a description of eighteen federal, state and regional monitoring for water quality, tissue and sediment quality. CALFED welcomes further additions to the monitoring programs identified in that report. CALFED is currently developing a Comprehensive, Monitoring, Assessment, and Research Program (CMARP) to coordinate monitoring among various CALFED activities. This program will coordinate water quality monitoring and other monitoring efforts to ensure a comprehensive monitoring approach. Although the approach to CMARP is currently under development, there are several possible ways that monitoring programs may be integrated. For example, the data collected by various programs could be stored in a central database, allowing individuals to share and access data from a central location. Other ways that monitoring programs may be integrated include: increasing the communication among programs by developing a communication system, perhaps via e-mail, to share technical knowledge and funding information. In addition, to facilitate the exchange of information among programs "clearinghouse" could be established for documents on technical monitoring protocols and funding sources.

DRAFT
Comments from CALFED Agencies
Water Quality Component Report (August 6, 1997)

Topic	Comment	Person/ Agency	Date	Response
General	A clearer and more complete understanding of the rulemaking process specified by the Safe Drinking Water Act for drinking water contaminants of greater concern in the Bay-Delta must be reflected. The Safe Drinking Water Act Amendments (SDWAA) of 1996 directed EPA to undertake a comprehensive program of research and data collection as necessary prerequisites before EPA could begin a required, negotiated rulemaking for long-term controls on microbial contaminants and disinfection byproducts (M/DBP). This statutorily-mandated course of action was advocated by and has the full participation of the drinking water community, including the California Urban Water Agencies members. We strongly believe that it would be unacceptably prejudicial to the rulemaking process directed by the SDWAA for EPA to participate in developing or endorse any CALFED alternative whose provisions for drinking water quality reflect or incorporate any assumptions about specific future outcomes or technological responses for the long term M/DBP rulemaking.	Karen Schwinn, USEPA	9/30/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> October 24, 1997: Comment noted. The 50 to 200 ppb bromide target is being taken under consideration.
Coordination with Ecosystem Restoration Program Plan	CALFED should consider incorporating the ecological/environmental components of the Water Quality Program into the Ecosystem Restoration Program. At minimum, a more complete discussion of the coordination and integration of Water Quality and Ecosystem Restoration programs must be given in the report. Restoring and maintaining good water quality is an essential component of any aquatic ecosystem restoration program. Salinity, toxic contaminants, nutrients, and turbidity are examples of environmental water quality parameters of concern that are also important parameters in the ecosystem restoration program.	Wayne White, USFWS	10/27/97	12/10/97: Coordination efforts between the ERPP and Water Quality Program will be discussed within the Water Quality Program Plan.

DRAFT
Comments from CALFED Agencies
Water Quality Component Report (August 6, 1997)

Topic	Comment	Person/ Agency	Date	Response
Salinity	<p>The report should address the ecological aspects of salinity, especially restoring and maintaining ecologically "beneficial" salinity patterns in the bay-delta ecosystem. Salinity is correctly listed as an environmental parameter of concern (Table 3.1) Salinity is an important water quality parameter affecting aquatic ecological processes (e.g., productivity) and the distribution and abundance of key species and habitats in the bay-delta (Nichols et al 1986, Science 231: 567-573). However, there is little discussion of ecological impacts of altered salinity regimes in the bay-delta ecosystem. No action strategies regarding restoring and/or maintaining ecologically "beneficial" salinity patterns (e.g., X2) are proposed in the report. The report should include a thorough discussion of the ecological importance of salinity patterns, current salinity patterns, the ecological impacts of altered salinity patterns and factors causing these alternations, the proposed ecological restoration "vision" for salinity patterns, and action strategies (including methods, performance measures, and success indicators) to achieve ecologically desirable salinity patterns. Restoring and maintaining ecologically beneficial salinity patterns may be addressed through the Ecosystem Restoration Program; but, it also should be an important component in the Water Quality Program. In fact, salinity is not explicitly stated as an ecosystem element in the ERPP. Thus, the need to address it as an important environmental parameter of concern in the Water Quality Report. Salinity is a good example of the need for close coordination and integration between the ecosystem restoration and water quality programs.</p>	Wayne S. White, USFWS	10/27/97	<p><i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i></p> <p>12/10/97: Draft response prepared and forwarded to Judy Heath stating the following: The CALFED Bay-Delta Program addresses the ecological impacts of salinity and the location of X2 in the Bay-Delta ecosystem in a variety of CALFED Programmatic EIR/EIS documents. Following is a list of the most recent versions, as of December 10, 1997, of CALFED documents containing descriptions of salinity and X2 as it relates to the Bay-Delta ecosystem:</p> <ul style="list-style-type: none"> • Water Quality Impacts Technical Report (11/7/97) • Environmental Impacts Technical Report -- Fisheries and Aquatic Resources (11/21/97) • Simulation with Delta Simulation Model (8/4/97) • Alternative 1A, 2B, 3E Analysis (12/1/97) <p>Together, these four documents evaluate the impacts of the CALFED alternatives as well as the ecosystem and water quality actions on salinity and X2 based upon model simulations. All of these documents are available from CALFED. To avoid duplication and confusion with other CALFED elements, the Water Quality Program did not analyze the ecological impacts of salinity and X2 for its August 6, 1997 Water Quality Component Report.</p>

DRAFT
Comments from CALFED Agencies
Water Quality Component Report (August 6, 1997)

Topic	Comment	Person/ Agency	Date	Response
Executive Summary	Page E-8: Table E-2 is referenced but is not in the document.	DFG - North Coast Region	9/10/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> October 27, 1997: The table was inadvertently removed. We apologize for the confusion.
Executive Summary	Page E-6, paragraph 3: As a substitute for the given salmon example, it could be explained that there are no viable populations of juvenile salmon in many small salmon bearing streams during the hot summer months when peak uses of some agricultural chemicals occur. Thus, with respect to those agricultural chemicals that do not persist in the environment, there is no risk to juvenile salmon during the mid-summer chemical application period; however, other species that are present and prefer warm water may be at risk.	DFG - North Coast Region	9/10/97	CALFED Response of 12/16/97: "In the report, copper effects in the Sacramento River were chosen as an example to illustrate the concept that, in general, much remains to be known about toxicity mechanisms in tributaries to the Sacramento-San Joaquin Estuary. A better example could have been used and, in fact, the Department has suggested better choices that we intend to adopt instead. While we continue to believe much is yet to be learned about toxicity problems in Delta tributaries, there was not an intention to suggest that there is a weakness in the linkage between the presence of copper in the upper Sacramento River and toxicity to aquatic organisms that inhabit affected streams. On the contrary, we fully agree there is a very long history and well documented history of cause and effect. The purpose of this draft was to provide our Water Quality Technical Group with information on the development of the water quality program to date. Your comments and those of other reviewers will be embodied in the water quality appendix to the CALFED programmatic EIS/EIR that is under preparation. We look forward to working with your staff to produce an adequate report, and appreciate your efforts to assist us."

DRAFT
Comments from CALFED Agencies
Water Quality Component Report (August 6, 1997)

Topic	Comment	Person/ Agency	Date	Response
Executive Summary	Page E-3, paragraph 2: The Department of Fish and Game is listed twice in this list and should be only once. The Department of Water Resources is not listed but should be as the State's major purveyor of municipal and industrial water.	DFG - North Coast Region	9/10/97	
Executive Summary	Following page E-7, Figure E-3 and E-4: Some waters are incorrectly designated as having metal problems. The mines or metal problems designated in the eastern half of Shasta Lake should be designated in the southwestern region of the lake in the vicinity of West Squaw and Backbone tributaries. The map indicates there is a selenium concern on Cow Creek; however, there is no supporting evidence for this concern either in the document or the Department's files.	DFG - North Coast Region	9/10/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> October 27, 1997: Incorporated into edits to the Water Quality Component Report. The location of the Shasta Lake parameters of concern are due to space limitations on the page. The purpose of the map is to indicate general rather than specific locations of problems. The indication of a selenium concern in Cow Creek was a typographical error.
Executive Summary	Page E-8, paragraph 2: This section is labeled Performance Targets and only mentions copper and mercury with no supporting discussion on 1) How such targets are derived and by whom; 2) What chemical form is referred to for each metal which is important biologically; 3) How do "Performance Targets" differ from "Performance Measures?"; and 4) What is the relationship between performance targets and background levels?	DFG - North Coast Region	9/10/97	
Executive Summary	On page E-6, the example that "an exceedance of copper in the upper Sacramento River during the fall-run chinook salmon juvenile outmigration period might be devastating to the population however, during other times of the year (when fall run are not present) there may be virtually no biological impact," is inaccurate and should be deleted or rewritten. The Sacramento River supports fall, late-fall and winter runs of chinook salmon as well as steelhead trout.	USFWS	9/5/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> October 24, 1997: Comment has been incorporated and the sentence has been removed.

DRAFT
Comments from CALFED Agencies
Water Quality Component Report (August 6, 1997)

Topic	Comment	Person/ Agency	Date	Response
Executive Summary and Water Quality Problem Areas Section 5	In Figure 5-1 and E-3, what is the difference between TDS and Salt as listed under other parameters of concern?	Leslie Grober, CVRWQCB	8/19/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> October 27, 1997: Salt refers to a variety of bromide and chloride molecules which are of concern to municipal and industrial stakeholders. TDS is used as a measure of salinity in general.
Executive Summary and Water Quality Problem Areas Section 5	Pages E-6 and 5-1: In both of these sections, there is a discussion how to define what constitutes a problem which may be unclear or misconstrued. This section states "If a parameter is measured against an existing objective, criteria or standard a decision must be made of whether the standard is appropriate, what it is meant to protect, and what level of exceedance is relevant...." This statement could be misconstrued to imply that CALFED is questioning the appropriateness of water quality standards and this misconception could provide members of the regulated community to question the State or EPA's authority to enforce standards and seek remediation based upon a violation of these standards. Attached is a memo from Rick Sugarek, EPA's Remedial Project Manager for the Iron Mountain Mine Superfund site that details this concern, and provides corrections and suggestions for other portions of the report as well. Because of the significant possibility that these statements may be used out-of-context in other proceedings, we are requesting that CALFED correct the statements and reissue this report.	Karen Schwinn, USEPA	9/30/97	

DRAFT
Comments from CALFED Agencies
Water Quality Component Report (August 6, 1997)

Topic	Comment	Person/ Agency	Date	Response
Executive Summary and Water Quality Problem Areas Section 5	<p>We are very concerned with statements in these two sections of the report. On pages E-6 and 5-1, both sections have similar language which says <i>"Defining what constitutes a 'problem' is a controversial and debatable issue. Very few of the parameters of concern have been studied sufficiently to understand their fate, transport and impact on beneficial uses of water. If a parameter is measured against an existing objective, criteria or standard, a decision must be made 1) whether the standard is appropriate, 2) what the standard is meant to protect, and 3) what level of exceedance is relevant (e.g., duration, season, geographic location, etc.). For example, an exceedance of copper in the Upper Sacramento River during the fall-run chinook salmon juvenile outmigration period might be devastating to the population however, during other times of the year (when fall-run are not present) there may be virtually no biological impact. For some parameters such as temperature and salinity extensive data has been collected."</i></p> <p>This statement is entirely incorrect. There are sensitive life stages of salmon present in the Upper Sacramento River below Keswick and above Red Bluff during all months of the year. Winter-run, Late fall run and Fall-run salmon are present from April to September, January to June and October to March, respectively. Steelhead trout incubate during the winter months. Extensive data and toxicological studies have shown exceedances of basin plan standards for copper are deleterious to beneficial uses of salmon. The Department strongly suggests you do not use copper criteria as an example and make incorrect statements regarding biological impacts.</p>	Richard Elliot, DFG	8/15/97	<p>CALFED Response - 8/15/97: In the report, copper effects in the Sacramento River were chosen as an example to illustrate the concept that, in general, much remains to be known about toxicity mechanism in tributaries to the Sacramento-San Joaquin Estuary. A better example could have been used and, in fact, the Department has suggested one or better choices that we intend to adopt instead. While we continue to believe much is yet to be learned about toxicity problems in Delta tributaries, there was not an intention to suggest that there is weakness in the linkage between the presence of copper in the upper Sacramento River and toxicity to aquatic organisms that inhabit affected streams. On the contrary, we fully agree there is a very long and well documented history of cause and effect. The purpose of this draft was to provide our Water Quality Technical Group with information on the development of the water quality program to date. It was not intended that the document be finalized. Instead, your comments and those of other reviewers will be embodied in the water quality technical appendix to the CALFED Programmatic EIR/EIS that is under preparation. We look forward to working with your staff to produce an adequate technical appendix and appreciate your efforts to assist us.</p>
Introduction Section 1	<p>Page 1-3, paragraph 2: The Department of Fish and Game is listed twice in this list and should be only once. The Department of Water Resources is not listed but should be as the State's major purveyor of municipal and industrial water.</p>	DFG - North Coast Region	9/10/97	

DRAFT
Comments from CALFED Agencies
Water Quality Component Report (August 6, 1997)

Topic	Comment	Person/ Agency	Date	Response
Background Section 2 Water Quality Issues	Page 2-2: The Sacramento River should be included as a source of pesticides entering the Delta.	Jerrold Bruns, CVRWQCB	8/19/97	
Parameters of Concern Section 3	Page 3-6, paragraph 1: One or two sentences that mention how wastes can be discharged to surface water that have high biological oxygen demand causing a reduction in dissolved oxygen should be included.	DFG - North Coast Region	9/10/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> October 27, 1997: Comment incorporated into October 31, 1997, version of Affected Environment document.

DRAFT
Comments from CALFED Agencies
Water Quality Component Report (August 6, 1997)

Topic	Comment	Person/ Agency	Date	Response
Parameters of Concern Section 3	<p>Nutrients (nitrogen, phosphorus) should be included as an environmental parameter(s) of concern in section 3 and Table 3.1. Nutrient loading is discussed throughout the report as a water quality issue and concern. For example, high nutrient levels are listed under water quality issues and concerns on page 2-2. Nutrient loading is discussed in the section on environmental water quality issues and concerns (p. 2-4). Nutrients are listed as a parameter of concern for Suisun marsh wetlands in the CALFED problem area and several other Clean Water Act Section 303(d) listed impaired water bodies that may affect the CALFED problem area (Appendix D). Nutrient loading is a water quality concern in south San Francisco Bay (Hager and Schemel 1996, pp. 189-215 in <u>San Francisco Bay: The Ecosystem</u>), which also is an impaired water body that may affected the CALFED problem area. Thus, nutrients (nitrogen and phosphorus) should be included as an environmental parameter of concern. The Ecosystem Restoration Program Plan states that nutrient processes (e.g., nutrient cycling, primary productivity) are important elements in ecosystem management and restoration. Nutrient processes are an important component of the following ecosystem elements discussed in ERPP: bay-delta aquatic foodweb, natural sediment supply, all of the aquatic and wetland habitats, herbivorous waterfowl (indirectly), invasive aquatic plants, and contaminants. Nutrient dynamics are an important ecological process in all aquatic ecosystems, especially estuaries. Nutrient dynamics in the bay-delta ecosystem need to be understood and monitored to facilitate successful ecosystem restoration and protection.</p>	Wayne White, USFWS	10/27/97	

DRAFT
Comments from CALFED Agencies
Water Quality Component Report (August 6, 1997)

Topic	Comment	Person/ Agency	Date	Response
Parameters of Concern Section 3	Page 3-1, Table 3.1: Light attenuation/penetration or water clarity should be listed (with turbidity or separately) as an environmental parameter of concern. Light attenuation is discussed as a parameter of concern on p. 3-11. Light attenuation is influenced by factors in addition to turbidity. Light extinction coefficient is the preferred measure for this parameter. Secchi disk depth (with corresponding correlation/regression factor with extinction coefficient) would also be an acceptable measure.	Wayne White, USFWS	10/27/97	
Parameters of Concern Section 3	Table 3.4: Selenium. For tissue target ranges for Sacramento River, San Joaquin River, and the Delta, we strongly recommend using the no effect range recommended by the San Luis Drain Re-use Technical Advisory Committee, <4 ppm for fish tissue and <3 ppm for food chain organisms (invertebrates). It is not appropriate to set target levels at a higher range (that given in Table 3.4), when actions need to be taken to decrease selenium concentrations.	Wayne White, USFWS	10/27/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 12/10/97: Draft response prepared and forwarded to Judy Heath stating the following: The tissue values used for selenium were recommended by the Water Quality Parameter Assessment Team and are intended to reflect San Luis Drain Reuse Values. Based upon a review of the San Luis Drain Reuse Technical Advisory Committee Guidelines, May 1993, the guidelines appear consistent with the values in the August 6, 1997 Water Quality Component Report.
Parameters of Concern Section 3	On page 3-3 the statement that pesticides are rarely detected in Delta water samples is not true. A variety of pesticides are routinely detected. The numerical targets in Table 3.4 should be used as indicators of success or another bullet should be added to "method" that calls for development of appropriate numerical goals.	Jerrold Bruns, CVRWQCB	8/19/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> Phrase was removed for the October 31, 1997, version of Affected Environment document. Other comments noted.

DRAFT
Comments from CALFED Agencies
Water Quality Component Report (August 6, 1997)

Topic	Comment	Person/ Agency	Date	Response
Parameters of Concern Section 3	On page 3-12 there is no mention of the comprehensive monitoring programs on selenium, pesticides, metals and toxicity conducted by the Regional Board since 1984.	Jerrold Bruns, CVRWQCB	8/19/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> October 28, 1997: Follow-up response was prepared for review by Rick Woodard, asking Jerrold Bruns for a description of the existing monitoring programs he would like incorporated. Forwarded November 11, 1997, after review by Rick Woodard..
Parameters of Concern Section 3	On page 3-12, the CVRWQCB's program of water quality monitoring for the lower San Joaquin River and the Grassland Area of western Merced County should be included.	Leslie Grober, CVRWQCB	8/19/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> October 30, 1997: Prepared follow-up response to Jerry Bruns asking for information mentioned by Leslie Grober for review by Rick Woodard. Forwarded to Jerry Bruns November 11, 1997, after review by Rick Woodard.
Parameters of Concern Section 3	Salinity is correctly listed as an environmental parameter of concern on Table 3.1. Salinity is an important water quality parameter affecting aquatic ecological processes (e.g., productivity) and the distribution and abundance of key species and habitats in the bay-delta.	Doug Morrison, USFWS	9/16/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> Comment noted.

D - 0 3 5 0 9 0

DRAFT
Comments from CALFED Agencies
Water Quality Component Report (August 6, 1997)

Topic	Comment	Person/ Agency	Date	Response
Parameters of Concern Section 3	Attached are the water quality objectives for boron and other trace elements from the Water Quality Control Plan for the CVRWQCB, 3rd edition, 1994 as revised in 1997, for Table 3.4. EC objectives for the SJR near Vernalis can be obtained from the SWRCB May, 1995, Water Quality Control Plan.	Leslie Grober, CVRWQCB	8/19/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> October 27, 1997: Comment noted.
Parameters of Concern- Addition	Light attenuation/penetration or water clarity should be listed as an environmental parameter of concern.	USFWS	9/5/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> October 24, 1997: Light attenuation/penetration is addressed by turbidity.
Parameters of Concern- Addition	Nutrients (nitrogen, phosphorous) should be included as an environmental parameter(s) of concern in Section 3. Nutrient loading is discussed throughout the report as a water quality issue and concern. Nutrients are listed as a parameter of concern for Suisun marsh wetlands in the CALFED problem area and several other Clean Water Act Section 303(d) listed impaired waterbodies that may affect the problem area. Nutrient loading is water quality concern in south San Francisco Bay which is also an impaired waterbody that may affect the CALFED problem area; therefore, nutrients should be added as an environmental parameter of concern.	USFWS	9/5/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> October 30, 1997: Prepared response to USFWS regarding evidence that phosphorus is significant and asked to present that evidence at the Water Quality Technical Group meeting December 3, 1997. Response was forwarded to Rick Woodard for review. November 12, 1997: After review by Rick Woodard, incorporated changes and forwarded response which invited USFWS to present evidence at Parameter Assessment Team meeting December 3, 1997. Comments will not be available for incorporation in October 31, 1997, version of Affected Environment.

DRAFT
Comments from CALFED Agencies
Water Quality Component Report (August 6, 1997)

Topic	Comment	Person/ Agency	Date	Response
Sources and Loadings of Parameters Section 4	Table 4-1 and 4-8 should show the ocean as a source.	Ted Roefs, USBR	8/12/97	<p><i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i></p> <p>Rick's Response - 8/15/97: Thanks for the comments. I would be happy to sit down with you and discuss the overall issue of specificity, and how we might be more specific without exceeding our "Programmatic Level" mandate.</p> <p>October 27, 1997: The sources and loadings section is being rewritten, but will not be completed for the October 31, 1997, version of the Affected Environment document.</p>
Sources and Loadings of Parameters Section 4	Page 4-2, paragraph 1: Correct "operating" to "operations." Substitute the following sentence to correctly depict the nature of the reaction in Sentence 2: "Water and oxygen now travel through the fractured and partially collapsed workings where they come in contact with the remnants of the sulfide ore deposit forming sulfuric acid." Substitute Sentence 2 with: "The anadromous fish that spawn in the upper Sacramento River include winter-run chinook, spring-run chinook, fall-run chinook, late-fall run chinook, steelhead, green sturgeon, white sturgeon, striped bass, American shad and lamprey." Both the spring-run chinook and the winter-run chinook hold over in the upper river for an extended period prior to spawning. The juvenile steelhead hold over in the upper river for years prior to emigrating to the ocean. The last sentence should include spring-run chinook, winter-run juveniles and steelhead fry that are present in the river in the wet season. The wet season better describes the period of uncontrolled release from Spring Creek Debris Dam than the winter period. Historically, uncontrolled releases have occurred in the late fall and spring as well as the winter. There have been discharges of contaminated sediments that originated from the Iron Mountain Mine discharge during the summer.	DFG - North Coast Region	9/10/97	

DRAFT
Comments from CALFED Agencies
Water Quality Component Report (August 6, 1997)

Topic	Comment	Person/ Agency	Date	Response
Sources and Loadings of Parameters Section 4	Page 4-1, paragraph 2: The sources of water quality parameters of concern list should contain elevated temperature and oxygen depleting substances because they are parameters of concern in Section 3. Elevated temperature and oxygen depleting substances should also be included under the municipal industrial category and the agricultural category. The other source of elevated temperature is the heat that is collected and stored in the top layers of reservoirs that can be discharged.	DFG - North Coast Region	9/10/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> October 27, 1997: Dissolved oxygen and temperature should be sufficient to cover; however, this issue will be raised at the next Water Quality Technical Group meeting on December 3, 1997, to determine if an agreement can be reached that dissolved oxygen is sufficient.

D - 0 3 5 0 9 3

DRAFT
Comments from CALFED Agencies
Water Quality Component Report (August 6, 1997)

Topic	Comment	Person/ Agency	Date	Response
Sources and Loadings of Parameters Section 4	A discussion of the basin boundaries used to measure loads and how loads are attributed to a particular source would be helpful. It would help to explain loads presented for TDS in the San Joaquin Basin. 2,170,000 thousand pounds of salt per year are attributed to agriculture and only 722,500 are emitted from the basin. Does the 2,170,000 figure represent new salts mobilized, or all salts estimated to be discharged from agriculture sources (including imported salts)? Does the value include only salts that reach a surface water body (the SJR)? 722,500 thousand pounds of salt seems very low. My estimates suggest a mean annual discharge of salt from the SJR near Vernalis is closer to 1,500,000 thousand pounds per year. Selenium emissions of 2,000 pounds per year also seem extremely low. Without more explanation, numbers presented will have little value. The discussion of background loads needs to be expanded. If the concentration of some 'metals, trace elements, salts..' occur in low concentrations, uninfluenced by human activities, is it appropriate to attribute such loads to human activities? Loads attributed to such activities would be of limited value because the background component is unknown. Further, if such load numbers are presented, a disclaimer that addresses background loads should appear in the tables so the numbers are not used out of context.	Leslie Grober, CVRWQCB	8/19/97	Response of Rick Woodard 12/2/97: You were concerned about the estimates of TDS Table 4-8 and the need to better define the basin concept and account for background loads. With respect to the loads estimates, you indicate that the data you are familiar with suggests that the annual load at Vernalis on the San Joaquin River is about 1.5×10^9 (trillion) pounds per year. On the basis of daily monitoring data (TDS) provided to us by DWR, and daily flow data from the USGS, we estimated that the annual load was about 2.2 trillion lbs/yr. This latter estimate includes a number of assumptions required to combine the relatively sparse water quality data with the almost continuous flow record. This estimate was erroneously entered as an agricultural load in Table 4-8 whereas it was intended that loads estimated using in-river data would represent basin loads. Thus, we would agree that your estimate of 1.5 trillion pounds per year is the right order of magnitude, and is the best we can do with this data. Let me now address your second point, what is meant by basin loads? The intent was to use outfall or drain data wherever available to estimate activity-specific loads (e.g., agricultural or urban) and to use river data to estimate the total basin loads. Ideally then, the basin loads and the sum of the individual activity-specific (or source) loads could be compared for reasonableness (really and order of magnitude check). The estimate for the basin load in Table 408 (0.7×10^9) is not correct and should have been based on the calculations described above which yielded 2.2 trillion lbs/yr. And perhaps the 1995 CUWA report (Study of Drinking Water Quality in Delta Tributaries) which yields about 3 trillion lbs/yr. You are correct that, ideally, we would like to distinguish background loads from loads associated with human activity and we will certainly qualify the data so the reader is aware that load estimates include background. We do feel that isolating background from man-made loads is a major research effort and outside the scope of the requirements of the PEIS/EIR. You also questioned the estimate for selenium in Table 4-6, suggesting that the estimate of 2,000 lbs/yr. For the San Joaquin seemed low. Unfortunately, the Component Report did not include our latest estimates, which were about 9,000 lbs/yr. This estimate is also more in agreement with data published in the CVRWQCB 1996 Agricultural Drainage Report for the Grassland Area. <i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> October 27, 1997: The sources and loadings section is being rewritten, but will not be completed for the October 31, 1997, version of the Affected Environment document.

DRAFT
Comments from CALFED Agencies
Water Quality Component Report (August 6, 1997)

Topic	Comment	Person/ Agency	Date	Response
Sources and Loadings of Parameters Section 4	There are deficiencies in the loadings tables. Many lack data that are known to exist, but have yet to be incorporated. This must be done before these tables will be of any value in evaluating existing relative source contributions, much less assessing the potential impacts of the various alternatives. Specifically, Table 4-1 for bromide loadings does not contain data for the impacts of seawater intrusion, although such data are available and the concerns for bromate from seawater dominate the Bay Delta drinking water discussions. Similarly, the TOC data in Table 4-9 does not contain loadings from the Delta, although a major argument is that it is the Delta contributions to TOC that need to be mitigated.	Karen Schwinn, USEPA	9/30/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> October 24, 1997: Comment noted. The sources and loadings section is being rewritten, but will not be completed by the October 31, 1997, version of the Affected Environment document.
Sources and Loadings of Parameters Section 4	Only metals are discussed in any detail. Should include similar discussion for other parameters listed in first paragraph. Tables should be included for total nitrogen and total phosphorus.	USFWS	9/5/97	
Sources and Loadings of Parameters Section 4	Pages 4-1, 4-2: Only metals are discussed in any detail. CALFED should include similar discussions for other parameters listed in the first paragraph.	Wayne White, USFWS	10/27/97	
Sources and Loading of Parameters Section 4	Page 4-6, loading tables: CALFED should include tables for total nitrogen and total phosphorus loadings.	Wayne White, USFWS	10/27/97	
Water Quality Problem Areas Section 5	Page 5-1, the second and third bullets: Do we really want to say Agricultural Drinking Water? Why not just say ability of Delta diversion to support agricultural use? Should FWS supposed effort to rate pollutants be mentioned somewhere near here?	Ted Roefs, USBR	8/12/97	Rick's Response - 8/15/97: Thanks for the comments. I would be happy to sit down with you and discuss the overall issue of specificity, and how we might be more specific without exceeding our "Programmatic Level" mandate.

DRAFT
Comments from CALFED Agencies
Water Quality Component Report (August 6, 1997)

Topic	Comment	Person/ Agency	Date	Response
Water Quality Problem Areas Section 5	Figure 5-1: Some waters are incorrectly designated as having metal problems. The mines or metal problems designated in the eastern half of Shasta Lake should be designated in the southwestern region of the lake in the vicinity of West Squaw and Backbone tributaries. The map indicates there is a selenium concern on Cow Creek; however, there is no supporting evidence for this concern either in the document or the Department's files. There is a major error with the bold line code used on this map to indicate river reach impacted by metals. First the bold line code is unreadable for the river. Second, the bold line is on Mill and Deer Creeks where there are no documented impacts from metals.	DFG - North Coast Region	9/10/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> October 27, 1997: Incorporated into edits to the Water Quality Component Report. The location of Shasta Lake parameters of concern are due to space limitations on the page. The purpose of the map is to indicate general rather than specific locations of problems. The indication of a selenium concern in Cow Creek was a typographical error.

D-035096

DRAFT
Comments from CALFED Agencies
Water Quality Component Report (August 6, 1997)

Topic	Comment	Person/ Agency	Date	Response
Water Quality Problem Areas Section 5	Page 5-1: The example that "an exceedance of copper in the upper Sacramento River during the fall-run chinook salmon juvenile outmigration period might be devastating to the population however, during other times of the year (when fall run are not present) there may be virtually no biological impact," is inaccurate and should be deleted or rewritten. The Sacramento River supports fall, late-fall and winter runs of chinook salmon as well as steelhead trout.	USFWS	9/5/97	CALFED Response on 8/15/97 to a similar DFG comment: In the report, copper effects in the Sacramento River were chosen as an example to illustrate the concept that, in general, much remains to be known about toxicity mechanism in tributaries to the Sacramento-San Joaquin Estuary. A better example could have been used and, in fact, the Department has suggested one or better choices that we intend to adopt instead. While we continue to believe much is yet to be learned about toxicity problems in Delta tributaries, there was not an intention to suggest that there is weakness in the linkage between the presence of copper in the upper Sacramento River and toxicity to aquatic organisms that inhabit affected streams. On the contrary, we fully agree there is a very long and well documented history of cause and effect. The purpose of this draft was to provide our Water Quality Technical Group with information on the development of the water quality program to date. It was not intended that the document be finalized. Instead, your comments and those of other reviewers will be embodied in the water quality technical appendix to the CALFED Programmatic EIR/EIS that is under preparation.

D-035097

DRAFT
Comments from CALFED Agencies
Water Quality Component Report (August 6, 1997)

Topic	Comment	Person/ Agency	Date	Response
Water Quality Problem Areas Section 5	Page 5-1: The report presents inaccurate statements about copper toxicity which should be deleted or rewritten. Specifically, the example given on page 5-1 (and E-6) that "an exceedance of copper in the upper Sacramento River during the fall-run chinook salmon juvenile outmigration period might be devastating to the population however, during other times of year (when fall run are not present) there may be virtually no biological impact" is inaccurate and should be deleted or rewritten. Exceedance of copper objectives can result in toxicity to sensitive life stages of fish and other organisms, including, but not limited to, fall-run chinook salmon. The upper Sacramento River supports fall, late-fall, spring and winter runs of chinook salmon, as well as steelhead trout. The fall, late-fall winter runs spawn in the upper Sacramento River and juveniles of all four runs and steelhead outmigrate down the river. Resident rainbow trout also spawn in the Sacramento River and its tributaries and occur in the river year round. When all four runs of chinook salmon are considered, as well as steelhead and resident rainbow trout, juvenile salmonids are present in the upper Sacramento River year round. Thus, exceedance of copper objectives at any time of year may have a biological impact to one or more runs of chinook salmon, or to steelhead or resident trout.	Wayne White, USFWS	10/27/97	
Water Quality Problem Areas Section 5	Page 5-2: Impaired Water Bodies Subsection: Discussions of Sacramento River Basin and Delta do not seem to adequately address agricultural sources of water quality problems.	Wayne White, USFWS	10/27/97	
Water Quality Problem Areas Section 5	Page 5-2: Impaired Water Bodies Subsection, San Francisco Bay: Need to define the part of the bay included in the discussion and the CALFED program (does not include central and south SF bay). You should mention nutrient inputs from wastewater treatment plants.	Wayne White, USFWS	10/27/97	

DRAFT
Comments from CALFED Agencies
Water Quality Component Report (August 6, 1997)

Topic	Comment	Person/ Agency	Date	Response
Water Quality Problem Areas Section 5	Discussions of Sacramento River Basin and Delta do not seem to adequately address agricultural sources of water quality problems. The part of the San Francisco Bay included in discussion and the CALFED program needs to be defined. Mention nutrient inputs from wastewater treatment plants.	USFWS	9/5/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> October 24, 1997: Comment noted.
Existing Programs Section 6	Page 6-4, paragraph 1: The reference to background levels of metals should be submitted with the term "metal levels." It is not possible to determine what portion of the reported metal concentrations are background and which are from upstream pollution; especially in the Sacramento River in the vicinity of Redding where most of the metal concentrations are known to increase downstream of the Iron Mountain Mine discharges.	DFG - North Coast Region	9/10/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> October 27, 1997: Comment incorporated into October 31, 1997, version of Affected Environment document.
Existing Programs Section 6	Page 6-3: A discussion on nitrogen, phosphorus, and organic carbon; the major pollutants discharged from wastewater treatment plants should be included.	USFWS	9/5/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> October 24, 1997: Comment noted.
Existing Programs Section 6	Page 6-3: Wastewater Discharges: This subsection should include a discussion on nitrogen, phosphorus, and organic carbon, the major pollutants discharged from wastewater treatment plants.	Wayne White, USFWS	10/27/97	
Existing Programs Section 6	Page 6-3: The section on wastewater discharges needs to be rewritten. The reference to the Inland Surface Water Plan is wrong. The NPDES does not regulate discharges from house boats.	Jerrold Bruns, CVRWQCB	8/19/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> October 24, 1997: Comment incorporated into October 31, 1997, version of Affected Environment document.

DRAFT
Comments from CALFED Agencies
Water Quality Component Report (August 6, 1997)

Topic	Comment	Person/ Agency	Date	Response
Action Strategies Section 7	In general, the methods given under the action strategies should be described more completed.	Wayne White, USFWS	10/27/97	<p><i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i></p> <p>12/10/97: Draft response prepared and forwarded to Judy Heath stating the following: A Water Quality Implementation Plan will be developed as part of Phase III of CALFED. The Plan will provide greater specificity on actions, identify a mechanism for prioritization, and identify implementing entities.</p>
Action Strategies Section 7	I contributed to extensive comments on this section that were submitted to you by Gail Louis of EPA. I understand that, to date, not all comments have been addressed in this draft.	Leslie Grober, CVRWQCB	8/19/97	<p><i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i></p> <p>October 27, 1997: Comment noted.</p>

D-035100

DRAFT
Comments from CALFED Agencies
Water Quality Component Report (August 6, 1997)

Topic	Comment	Person/ Agency	Date	Response
Action Strategies Section 7 Mine Drainage	Page 7-1 and 7-4: The Department did not participate in the derivation of the "Performance Target" for copper and we do not concur with the "Performance Target" or "Performance Measure" stated in this document. The Department's recommended Performance Target is attainment of the basin plan for the CVRWQCB consistent with the Porter-Cologne Water Quality Act. Any discussion of copper loading is premature until the USGS completes their extensive studies on the fate and transport of copper in the Sacramento River.	DFG - North Coast Region	9/10/97	<p><i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i></p> <p>10/30/97: Prepared follow-up response to Department of Fish and Game for clarification and forwarded to Rick Woodard for review. November 11, 1997: After review by Rick Woodard, incorporated changes and forwarded response.</p> <p>11/17/97: Received telephone call from Jane Vorpagel. Department of Fish and Game supports the Basin Plan objectives for copper.</p> <p><i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i></p> <p>12/22/97: The indicator of success for copper in the WQPP is achievement of water quality targets which are based on Basin Plan objectives.</p>
Action Strategies Section 7 Mine Drainage	The methods given under the action strategies should be more completely described. Page 7-4: In the action strategy for reducing toxic effects of mine drainage, describe and give examples of treatment methods to remove metals and neutralize the acidity of mine drainage. Page 7-5: In action strategies for reducing toxic effects of metals and pesticides from urban and industrial runoff, identify and recommend source control methods. Page 7-8: Under action strategy for reducing impacts of municipal waste discharge; wetlands should be constructed on lands of low or no ecological value and specifically be constructed to treat wastewater effluent.	Doug Morrison, USFWS	9/16/97	<p><i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i></p> <p>11/21/97: A Water Quality Implementation Plan will be developed as part of Phase III of CALFED. The Plan will provide greater specificity on actions, identify a mechanism for prioritization, and identify implementing entities.</p>

DRAFT
Comments from CALFED Agencies
Water Quality Component Report (August 6, 1997)

Topic	Comment	Person/ Agency	Date	Response
Action Strategies Section 7 Mine Drainage	Biological success indicators and/or performance measures for actions regarding cadmium, copper, zinc and mercury should be the same as for selenium: reduce tissue concentrations, or other stress indicators, to levels that are not harmful to animals. Appropriate indicator species should be identified for each metal. If these concentrations or stress indicators are not known then appropriate research should be conducted to determine these concentrations and indicators. The necessary research should be listed under "Methods" or "Performance Measures."	Wayne White, USFWS	10/27/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 12/10/97: Draft response to USFWS provided to Judy Heath. Toxicity tests and tissue concentrations have been included as performance measures and indicators of success for many of the water quality actions associated with selenium in the WQPP.
Action Strategies Section 7 Mine Drainage	Page 7-4: <u>Action Strategy for Reducing Toxic Effects of Mine Drainage</u> : Describe and give examples of treatment methods to remove metals and neutralize acidity of mine drainage.	Wayne White, USFWS	10/27/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 12/10/97: Draft response to USFWS provided to Judy Heath. A Water Quality Implementation Plan will be developed as part of Phase III of CALFED. The Plan will provide greater specificity on actions, identify a mechanism for prioritization, and identify implementing entities.
Action Strategies Section 7 Urban and Industrial Runoff	Add biological success indicators and/or performance measures for actions regarding cadmium, copper, zinc, and mercury. These should be the same as for selenium: Reduce tissue concentrations or body burdens to levels that are not harmful to animals. Appropriate indicator species should be identified for each metal. If these concentrations are not known then appropriate research should be conducted to determine these concentrations. Page 7-6: Suggest changing the action to "Reduce the adverse ecological and toxic effects of nutrient loadings, including oxygen depletion,..." Actions regarding sediment loading and turbidity need ecological indicators of success. Need performance measures and success indicators related to light attenuation/penetration and phytoplankton production.	USFWS	9/5/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 12/19/97: Performance measures and indicators of success for applicable actions have been modified to include toxicity tests and tissue concentrations, as appropriate.

DRAFT
Comments from CALFED Agencies
Water Quality Component Report (August 6, 1997)

Topic	Comment	Person/ Agency	Date	Response
Action Strategies Section 7 Urban and Industrial Runoff	Page 7-5: <u>Action strategies for reducing toxic effects of metals and pesticides from urban and industrial runoff</u> . Identify and describe recommended source control methods, especially those for which incentives will be provided.	Wayne White, USFWS	10/27/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 12/10/97: Draft response provided to Judy Heath: Water quality actions are currently being evaluated and comments will be incorporated, where appropriate. Please note that the USFWS comments on water quality actions will be evaluated in concert with the more than 200 comments CALFED has received to date on the water quality actions. By January 10, 1998, CALFED staff will have comprehensively analyzed all the action comments received to date and incorporated them, as appropriate. Therefore, as of December 10, 1997, it is not possible to indicate exactly how the USFWS comments on water quality actions will be incorporated.
Action Strategies Section 7 Urban and Industrial Runoff	Page 7-6: <u>Action: "Reduce the toxic effects of nutrient loadings..."</u> : Suggest changing to "Reduce the adverse ecological and toxic effects of nutrient loadings, including oxygen depletion..."	Wayne White, USFWS	10/27/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 12/10/97: Draft response provided to Judy Heath: Water quality actions are currently being evaluated and comments will be incorporated, where appropriate. Please note that the USFWS comments on water quality actions will be evaluated in concert with the more than 200 comments CALFED has received to date on the water quality actions. By January 10, 1998, CALFED staff will have comprehensively analyzed all the action comments received to date and incorporated them, as appropriate. Therefore, as of December 10, 1997, it is not possible to indicate exactly how the USFWS comments on water quality actions will be incorporated.

DRAFT
Comments from CALFED Agencies
Water Quality Component Report (August 6, 1997)

Topic	Comment	Person/ Agency	Date	Response
Action Strategies Section 7 Urban and Industrial Runoff	Page 7-6, Actions dealing with sediment loading and turbidity: Ecological indicators of success are needed. Are these covered by Basin Plan objectives for turbidity? Need performance measures and success indicators related to light attenuation/penetration and phytoplankton production.	Wayne White, USFWS	10/27/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 12/10/97: Draft response provided to Judy Heath: Water quality actions are currently being evaluated and comments will be incorporated, where appropriate. Please note that the USFWS comments on water quality actions will be evaluated in concert with the more than 200 comments CALFED has received to date on the water quality actions. By January 10, 1998, CALFED staff will have comprehensively analyzed all the action comments received to date and incorporated them, as appropriate. Therefore, as of December 10, 1997, it is not possible to indicate exactly how the USFWS comments on water quality actions will be incorporated.
Action Strategies Section 7 Wastewater and Industrial Discharges	Page 7-7: Include ecological impacts in action "Reduce the impacts of domestic wastes" or formulate a separate action regarding the ecological impacts of domestic wastewater discharges, including the effects of organic carbon, nitrogen, and phosphorous loading. This would include developing appropriate methods, performance measures, and success indicators regarding ecological impacts. Page 7-8: Change the action to "Reduce the ecological and toxic impacts of oxygen depleting substances, including organic carbon and nutrient loads, and..." Add EPA algal bioassay for eutrophication to performance measures and indicators of success. Change indicators of success for reducing toxicity from ammonia and agricultural pesticides to "no likely significant toxicity to aquatic organisms based on three species toxicity bioassays." The success indicator for selenium is good. Should use revised (currently being done by USGS and USFWS) or existing ecological risk guidelines for selenium recommended by the San Luis Drain Re-Use Technical Advisory Committee.	USFWS	9/5/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 12/20/97: Comments incorporated into the WQPP.

DRAFT
Comments from CALFED Agencies
Water Quality Component Report (August 6, 1997)

Topic	Comment	Person/ Agency	Date	Response
Action Strategies Section 7 Wastewater and Industrial Discharges	Page 7-7, Action "Reduce the impacts of domestic wastes": Include ecological impacts (impacts to environmental uses) or formulate a separate action item regarding the ecological impacts of domestic wastewater discharges, including the effects of organic carbon, nitrogen, and phosphorus loading. This would include developing appropriate methods, performance measures, and success indicators regarding ecological impacts. For example, EPA algal bioassay for eutrophication/primary production.	Wayne White, USFWS	10/27/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 12/10/97: Draft response to USFWS provided to Judy Heath. Environmental beneficial uses have been incorporated into the action. Nitrogen and bioavailable phosphorus were recommended by the Parameter Assessment Team to be added to the Water Quality Parameter of Concern List on December 3. Actions, performance measures, and indicators of success will be developed as appropriate. EPA algal bioassays will be considered for evaluation along with other tools.
Action Strategies Section 7 Wastewater and Industrial Discharges	Page 7-8, Action "Reduce the toxic impacts of oxygen depleting substances and...": Change to: "Reduce the ecological and toxic impacts of oxygen depleting substances, including organic carbon and nutrient loads, and..." Add EPA algal bioassay for eutrophication to performance measures and indicators of success.	Wayne White, USFWS	10/27/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 12/10/97: Draft response to USFWS provided to Judy Heath. The action statement has been updated to include environmental beneficial uses. The Water Quality Technical Group is currently reviewing specific tools as indicators of success. EPA algal bioassays will be considered for evaluation along with other tools.

DRAFT
Comments from CALFED Agencies
Water Quality Component Report (August 6, 1997)

Topic	Comment	Person/ Agency	Date	Response
Action Strategies Section 7 Wastewater and Industrial Discharges	Page 7-8, Action strategy for reducing impacts of municipal waste discharge, "Treatment of municipal wastewater effluent in wetlands": Must use only wetlands specifically constructed for this purpose. These wetlands must be constructed on lands of low or not ecological value. These wetlands would not count toward mitigation requirements or ERPP wetland restoration targets.	Wayne White, USFWS	10/27/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 12/10/97: Draft response to USFWS provided to Judy Heath. The action statement has been updated to include environmental beneficial uses. The Water Quality Technical Group is currently reviewing specific tools as indicators of success. EPA algal bioassays will be considered for evaluation along with other tools.
Action Strategies Section 7 Agricultural Drainage	Page 7-10: Under Methods of reducing salinity, eliminate the second and third bullet.	Ted Roefs, USBR	8/12/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> Rick's Response - 8/15/97: Thanks for the comments. I would be happy to sit down with you and discuss the overall issue of specificity, and how we might be more specific without exceeding our "Programmatic Level" mandate. 12/22/97: Unable to determine subject of comment.
Action Strategies Section 7 Agricultural Drainage	Page 7-10: Another method to reduce toxicity from agricultural pesticides should be supporting development and testing management practices to reduce pesticide discharges. The "indicator of success" should be revised. Chronic indicators such as reproduction and growth need to be considered. A numerical goal needs to be established for chlorpyrifos and diazinon to provide entire aquatic community protection.	Jerrold Bruns, CVRWQCB	8/19/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 12/22/97: Comment incorporated. Results of toxicity tests are included as indicators of success. The Water Quality Technical Group is currently reviewing the specific tools to be used as indicators of success. Reproduction and growth in addition to survivability are being considered at this time. DFG acute and chronic hazard assessment criteria have been suggested as numerical targets by the Water Quality Technical Group. Although there is disagreement about the use of these numbers, no other targets have been proposed.

DRAFT
Comments from CALFED Agencies
Water Quality Component Report (August 6, 1997)

Topic	Comment	Person/ Agency	Date	Response
Action Strategies Section 7 Agricultural Drainage	Actions for reducing impacts from ammonia and agricultural pesticides: Indicators of success for reducing toxicity from ammonia and agricultural pesticides action items should be changed slightly from "improved survival of test organisms in three species toxicity bioassays" to "no likely significant toxicity to aquatic organisms based on three species toxicity bioassays." Otherwise, good indicators.	Wayne White, USFWS	10/27/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 12/10/97: Draft response to USFWS prepared for Judy Heath and provided electronically. Comment incorporated into the WQPP.
Action Strategies Section 7 Agricultural Drainage	Page 7-9, Action "Reduce toxic effects of selenium": The success indicator for selenium good and well stated. We recommend using the "no effect" level ecological risk guidelines for selenium from the San Luis Drain Re-Use Technical Advisory Committee, as discussed above in the comments on Table 3.4.	Wayne White, USFWS	10/27/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 12/10/97: Draft response to USFWS prepared for Judy Heath. The tissue values used for selenium were recommended by the Water Quality Parameter Assessment Team and are intended to reflect the San Luis Drain Reuse Values. Based upon a review of the San Luis Drain Reuse Technical Advisory Committee Guidelines, May 1993, the guidelines appear consistent with the values in the August 6, 1997 Water Quality Component Report.

DRAFT
Comments from CALFED Agencies
Water Quality Component Report (August 6, 1997)

Topic	Comment	Person/ Agency	Date	Response
Action Strategies Section 7 Water Treatment	Page 7-13: The action: "Improve total organic carbon, pathogens, turbidity and bromides at domestic water supply intakes" - could be reached in several ways. However, only a single "method" is given - "Relocate water supply intakes to areas that are not influenced by those discharges." The selection of this single method appears to be driven both by the performance targets, which inappropriately assume a single future regulatory outcome, and by one of the indicators of success: "Existing modern, well-operated treatment plants can successfully and reliably meet current and future drinking water standards without the need to significantly upgrade facilities." In conjunction, this indicator and method emphasize source replacement, offer a limited role for source water protection, and are inconsistent with CALFED's overall approach of balancing multiple goals. Source replacement would degrade ambient water quality by proposing the diversion of better quality water now left instream. To balance multiple goals, source replacement must be evaluated on its cost-effectiveness and environmental impacts relative to other compliance options, and cannot be the only means to carry out the action. Any method and indicator of success cannot be framed in terms of needs for treatment technologies or water quality to comply with a single, future regulatory outcome, but must be framed to assist generally in compliance with multiple future outcomes, consistent with the CALFED purpose statement.	Karen Schwinn, USEPA	9/30/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 12/20/97: Both source control actions and water treatment actions are included in the Water Quality Program due to stakeholder input.

D-035108

DRAFT
Comments from CALFED Agencies
Water Quality Component Report (August 6, 1997)

Topic	Comment	Person/ Agency	Date	Response
Action Strategies- Addition	There are no action strategies regarding restoring and/or maintaining ecologically "beneficial" salinity patterns (e.g., X2).	Doug Morrison, USFWS	9/16/97	<p><i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i></p> <p>12/20/97: Draft response prepared and forwarded to Judy Heath stating the following: The CALFED Bay-Delta Program addresses the ecological impacts of salinity and the location of X2 in the Bay-Delta ecosystem in a variety of CALFED Programmatic EIR/EIS documents. Following is a list of the most recent versions, as of December 10, 1997, of CALFED documents containing descriptions of salinity and X2 as it relates to the Bay-Delta ecosystem:</p> <ul style="list-style-type: none"> • Water Quality Impacts Technical Report (11/7/97) • Environmental Impacts Technical Report -- Fisheries and Aquatic Resources (11/21/97) • Simulation with Delta Simulation Model (8/4/97) • Alternative 1A, 2B, 3E Analysis (12/1/97) <p>Together, these four documents evaluate the impacts of the CALFED alternatives as well as the ecosystem and water quality actions on salinity and X2 based upon model simulations. All of these documents are available from CALFED. To avoid duplication and confusion with other CALFED elements, the Water Quality Program did not analyze the ecological impacts of salinity and X2 for its August 6, 1997 Water Quality Component Report.</p>

D-035109

DRAFT
Comments from CALFED Agencies
Water Quality Component Report (August 6, 1997)

Topic	Comment	Person/ Agency	Date	Response
Watershed Coordination Section 8	Page 8-2, last paragraph, last sentence: "...the Sacramento River Toxic Parameter Control Program..." should be the Toxic Pollutant Control Program.	DFG - North Coast Region	9/10/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> October 27, 1997: Comment incorporated into October 31, 1997, version of Affected Environment document.
Appendix C	The sections relating to cadmium loading notes and copper loading notes are unclear. For example, C-1, third sentence from bottom, regarding "Inactive mine drainage in the Sacramento Valley" states "Data in this report suggests that mine drainage represents about 50 percent of the total cadmium load from inactive mines." These sections are both confusing. The numbers on the pages are also incorrect; they skip from C-2 to C-7.	DFG - North Coast Region	9/10/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> October 27, 1997: The sources and loading section is being rewritten, but will not be completed for the October 31, 1997, version of the Affected Environment document.

D-035110

DRAFT
Comments from CALFED Agencies
Water Quality Affected Environment Report- Various Versions¹

Topic	Comment	Person/ Agency	Date	Response
General	<i>Version of Document Unknown:</i> Need to identify where the most technical knowledge is in a particular domain, and request that these people develop technical issues related to that domain.	Ted Roefs	12/4/96	
General	<i>Version of Document Unknown:</i> The San Joaquin Valley Drainage Program report should be used and added to the reference list.	Ted Roefs	12/4/96	
General	<i>July 7, 1997 Version:</i> The interaction of selenium and mercury in the western Delta should be discussed in the report.	Tom Maurer, USFWS	8/4/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> October 30, 1997: Prepared a follow-up response asking Tom Maurer for references and forwarded to Rick Woodard for review. November 11, 1997: Forwarded response after review and approval by Rick Woodard.
General	<i>July 7, 1997 Version:</i> The EPA selenium standard of 2.0 mg/L should be applied to wetlands in the San Joaquin Grasslands area.	Tom Maurer, USFWS	8/4/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> October 30, 1997: Prepared a follow-up response asking Jerrold Bruns, CVRWQCB, for the Board's response to this recommendation and forwarded to Rick Woodard for review. November 11, 1997: Forwarded response after review and approval of Rick Woodard.

DRAFT
Comments from CALFED Agencies
Water Quality Affected Environment Report- Various Versions¹

Topic	Comment	Person/ Agency	Date	Response
General	<i>July 7, 1997, Version:</i> The data collected by the USGS on the correlation of estrogenic effects in fish to total dissolved pesticide concentrations on the San Joaquin River should be included in the report.	Tom Maurer, USFWS	8/4/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> October 30, 1997: Prepared a follow-up response asking Tom Maurer for references and forwarded to Rick Woodard for review. November 11, 1997: Forwarded response after review and approval by Rick Woodard.
Carbofuran, Chlorpyrifos	<i>Version of Document Unknown:</i> Carbofuran is listed as an urban pesticide pollutant, whereas it is a restricted material and is not available to urban users. Chlorpyrifos, is available for domestic use. Please correct the documentation in question.	John Sanders Dept. of Pesticide Regulation	1/20/97	
Parameters of Concern	<i>Version of Document Unknown:</i> In the phrasing of some of the parameters of concern, the writing tended to suggest that "serious" adverse effects are occurring in the Delta, when there is only limited evidence to support this statement. The bioaccumulative potential of some organics is questionable.	CDFG	6/10/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> October 27, 1997: Comment incorporated into October 31, 1997, version of the Affected Environment document.
Parameters of Concern	<i>Version of Document Unknown:</i> The water quality goal specifically states that the program would improve water quality by reducing water quality parameters of concern before they enter the Bay-Delta. It is also important to reduce water quality parameters of concern derived within the Bay-Delta.	USBR	6/6/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> October 24, 1997: Sources within the Bay-Delta and outside the Bay-Delta may be considered.
Prioritization of Parameters of Concern	<i>Version of Document Unknown:</i> The prioritization of the specific pollutants of concern needs to be clearly described in the document. Prioritization could be developed in accordance with a species specific approach or from a regional perspective.	USBR	9/25/97	

DRAFT
Comments from CALFED Agencies
Water Quality Affected Environment Report- Various Versions¹

Topic	Comment	Person/ Agency	Date	Response
Salinity	<i>Version of Document Unknown:</i> You could improve salinity for one area without negatively affecting another area (for salts).	Ted Roefs, USBR	1/23/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> October 27, 1997: Comment noted.
Salinity	<i>Version of Document Unknown:</i> There remains a concern regarding salinity management and the potential for significant redirected impacts to Reclamation customers. Unless salinity is adequately addressed, significant impacts will occur in the Reclamation service area. Salinity in the system will increase in one area if reduced in another. (Please note, our concern relates to other constituents in addition to bromine).	USBR	9/25/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> October 27, 1997: Comment noted.
Salinity	<i>Version of Document Unknown:</i> We believe that salinity impacts to DMC are significant enough of a concern that all the subalternatives should be analyzed (not just Alt. 1, Alt.2 Alt 3e).	USBR	9/25/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> October 27, 1997: Comment noted.

¹.Several agencies forwarded mark-ups of documents which are not summarized due to length. Gail Louis, EPA, After July 7, 1997; Ted Roefs, Lenore Thomas, USBR, 9/24/97; Lenore Thomas, USBR.

DRAFT
Comments from CALFED Agencies
Phase II Alternatives Descriptions - Version Unknown

Topic	Comment	Person/ Agency	Date	Response
General	It would be helpful to have an appendix to explain the rationale and technical bracketing parameters involved in each of the alternative configurations.	USBR	6/6/97	CALFED Response - 8/13/97: Noted.
General	A more detailed discussion of the water quality standards being used and the possible modifications to Decision 95-6 would be useful to help explain the potential future scenarios. At a minimum, we recommend a description of the State Board process and status.	USBR	6/6/97	CALFED Response - 8/13/97: A more detailed discussion of water quality standards being used, and possible future modifications will be included in the Affected Environment section of the water quality appendix of the programmatic EIR/EIS.
General	Throughout the document there is use of popular terminology such as "ecosystem health." Defining these terms could avoid ambiguous interpretations and conflicts later in the process.	USBR	6/6/97	
General	The CALFED planning process is unique and different from both the Federal and State traditional approaches. It would be helpful to define the specific differences (process considerations) and criteria (e.g., cost-benefit analysis).	USBR	6/6/97	
General	In describing the ecological hub of the Central Valley, it would help to include San Francisco Bay, San Pablo Bay, Suisun Bay, rather than just the "Bay." Replacing "hub" with "critical component" may remove a characterization that might offend some people.	USBR	6/6/97	
General	Item 2: In the third line, change "issue" to "issues."	Penny Howard, USBR	10/28/97	
General	Item 3: In the first line, change "should clearly described" to read "should be clearly described" or "should clearly describe."	Penny Howard, USBR	10/28/97	

DRAFT
Comments from CALFED Agencies
Phase II Alternatives Descriptions - Version Unknown

Topic	Comment	Person/ Agency	Date	Response
General	Item 5: In the second line, change "This" to read "If this." Add "If reducing pollutants mean reducing the concentration of pollutants in water diverted from the Delta, then the document should address the source of additional water for dilution."	Penny Howard, USBR	10/28/97	
Common Programs	It would be helpful to the reader if the four program goals could be stated in the introduction with the mission of the program, rather than following the brief summary of the common programs.	USBR	6/6/97	
Common Programs	There is a concern that the level of detail attained within each common program is significantly different, thus preventing an equitable evaluation of the proposed alternatives. The alternatives would be more credible if there was close parity among common programs.	USBR	6/6/97	CALFED Response - 8/13/97: Level of detail reflects current program development. Work progressing on increasing the level of detail of all for the common programs. However, the reviewers need to recognize that the level of detail to be achieved during this phase of the Program will reflect the programmatic approach authorized by the CALFED Policy Group.
Water Quality Program	The program should also provide a more complete description of current programs and activities to address the problems, and identify how the CALFED program will complement or supplement existing efforts. In addition, the program needs to identify critical data gaps and limitations that currently hamper our ability to address key problems.	Karen Schwinn, USEPA	9/30/97	<i>Appears in 10/31/97 Resolution Plan for Water Quality Affected Environment Report as:</i> October 24, 1997: Current programs and activities to address the problems will be included in the Water Quality Implementation Plan.
Coordinated Watershed Approach	Page 12: The second paragraph under Coordinated Watershed Approach- change the "State Water Resources Control Board's (SWRCB) Sacramento River Watershed Program" to "Sacramento River Watershed Program." Change the "Sacramento River Toxic Parameter Control Program" to "Toxic Pollutant Control Program."	Various, USEPA	5/29/97	

DRAFT
Comments from CALFED Agencies
Phase II Alternatives Descriptions - Version Unknown

Topic	Comment	Person/ Agency	Date	Response
Interagency Ecological Program	The Interagency Ecological Program (IEP) is charged with water quality monitoring in the San Francisco Bay-Delta. In the Phase II Alternatives Descriptions, it is important to include a description of how IEP will be involved with CALFED's Comprehensive Monitoring Assessment and Research Plan.	USBR	6/6/97	CALFED Response - 6/30/97: The Interagency Ecological Program (IEP) is charged with performing ecologically related water quality monitoring in the Bay-Delta. The Comprehensive Monitoring, Assessment, and Research Program will include a sizeable component of ecological monitoring to be conducted through the IEP, and will include other components as well, probably including other entities and citizen involvement. The document will be expanded to include a discussion of this concept.
Drinking Water Quality	There is a concern over the uncertainty regarding drinking water quality. There is the potential for greater discharges of dissolved organic carbons (DOCs) due to habitat restoration in the Delta, which could impact drinking water quality. DOCs discharges are generally greater from anaerobic soils, so conversion of Delta islands from agricultural use to wetland habitat could increase DOC/TOC levels, which could lead to higher trihalomethane (THM) levels in drinking water quality drawn from the Delta. This could argue for the need for an isolated facility (Alternative 3). There is also a concern that DOC impacts to the food chain in San Francisco Bay be considered in the alternatives analysis. (See also: Water Quality Program Comments)	Larry Smith, USGS	4/23/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Affected Environment as:</i> October 27, 1997: Comment noted.
Drinking Water Regulations	EPA is in the midst of extensive rulemaking, data collection, and regulatory negotiations to revise drinking water regulations. These regulations will need to balance the treatment for microbial organisms with the concern over disinfectant byproducts from this treatment. EPA's rulemaking timeframe will not produce greater clarity on this issue within CALFED's decision-making timeframe. However, CALFED should still model the water quality impacts of the different alternatives.	Various Agencies, ClubFed Retreat	4/23/97	
Bromide	Page 10: San Joaquin Basin - Although bromide is an issue in the Delta, it is not a substance at issue with the Grasslands area discharges as suggested here.	Tom Maurer, USFWS	6/5/97	

DRAFT
Comments from CALFED Agencies
Phase II Alternatives Descriptions - Version Unknown

Topic	Comment	Person/ Agency	Date	Response
Actions	The actions contained in this common program and their effects on the alternatives are not clearly depicted in this document. At this level of complexity it is difficult to evaluate the alternatives for technical adequacy.	USBR	6/6/97	CALFED Response - 6/30/97: The Affected Environment report, currently under preparation, provides considerably greater detail of the basis for water quality problem definition, and on the actions to correct these problems. The Impact Analysis report, also under preparation, will describe <u>at the Programmatic Level</u> , the effects of the common program on the alternatives. We acknowledge that, because specific projects and locations will not be identified in the current phase of the program, it will not be possible to perform a detailed analysis of the effects of the Water Quality Common Program on the alternatives.
Actions	Page 11: The statement is made "to address potential toxicity to water and sediment." To clarify this sentence, we suggest, "to address the potential toxicity of contaminated water and sediment."	USBR	6/6/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 12/11/97: Phrase updated to reflect essence of comment.

D-035117

DRAFT
Comments from CALFED Agencies
Phase II Alternatives Descriptions - Version Unknown

Topic	Comment	Person/ Agency	Date	Response
Actions Strategies	We believe that the suite of Actions Strategies that comprises the Water Quality Common Program needs to be reworked both to provide more context about the priority water quality problems to be addresses and to strengthen the program. The individual actions should be framed by problem statements that highlight the problems (include the severity and geographic extent of the problem) and provide a linkage between the various actions targeting different sources. The problem statements and actions should be stated as broadly as possible, so as not to limit the range of solutions or methods - both regulatory and voluntary in nature - to address the problem. We propose transforming the Action Strategies into an implementation plan (or developing an implementation plan to supplement the Action Strategies) that provides greater specificity on actions, relative priorities, how the common program will supplement existing efforts, funding commitments, and responsible agencies or entities. Although this may go beyond the programmatic level of detail, we believe this type of information will be necessary to provide assurances for both the agencies and the stakeholders that water quality issues will be satisfactory addressed through the Water Quality Program. We have attached the most recent version of an interagency effort to articulate problem statements to frame the assortment of actions contained in Appendix B of the Phase II report.	Karen Schwinn, USEPA	9/30/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 12/19/97: A Water Quality Implementation Plan will be developed as part of Phase III of CALFED. The Plan will provide greater specificity on actions, identify a mechanism for prioritization, and identify implementing entities.
Actions and Targets	In Alternatives 1 and 2, the water quality common program actions and targets do not change. However, it appears that there are only minor modifications in Alternative 3. We are concerned that there is no substantive difference. A more detailed description of the differences within each alternative would clarify this question.	USBR	6/6/97	
Performance Targets	Page 11: Performance targets are defined as load reductions only, however, Appendix B includes several other methods to evaluate performance. Including these other methods and targets will help the reader better under the work to be done.	USBR	6/6/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 11/21/97: The definition of performance measure has been revised in the Water Quality Program Plan to include a variety of methods to evaluate performance.

DRAFT
Comments from CALFED Agencies
Phase II Alternatives Descriptions - Version Unknown

Topic	Comment	Person/ Agency	Date	Response
Dilution Actions	Page 12: Dilution actions in the water quality program conflict with the water use efficiency program objectives.	Tom Maurer, USFWS	6/5/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> CALFED Response - 8/13/97: The Water Quality and Water Use Efficiency programs have been coordinating their efforts and dilution is a low priority action.
Mine Drainage Actions	Page 9, second paragraph: The summary on mine drainage actions in the Delta does not include copper, cadmium and zinc. Listing actions to reduce mercury alone may give the impression that we are not taking actions for the other parameters of concern	USBR	6/6/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> CALFED Response - 8/13/97: The document will be altered to mention identification of activities that may promote methylation of mercury. 12/19/97: Comment incorporated into Water Quality Program Plan.
No Action Element	Do the agencies concur that the projects which have been screened for inclusion in the Program No Action alternatives belong there? Are all screening criteria met (assuming we concur with the criteria?) The question regarding inclusion in No Action concerns, for the most part, projects which are not currently in place. The No Action screen establishes criteria to establish that such projects are reasonable certain to be implemented --i.e., have completed environmental review, received all permits, are funded... What assumptions are being made regarding CVPIA implementation currently (for the existing conditions) and in the future (No Action)? If it is assumed that all provisions are implemented by 2020, what outcomes (results) are then shown in the impact analysis for No Action? What is the analytical basis for outcomes shown?	Various Agencies, ClubFed Retreat	4/23/97	

DRAFT
Comments from CALFED Agencies
Phase II Alternatives Descriptions - Version Unknown

Topic	Comment	Person/ Agency	Date	Response
No Action Element	It is unclear exactly what specific components form "no action." It would be helpful to have a complete description of the no action alternative - projects, policies, procedures, modeling assumptions, etc.	USBR	6/6/97	CALFED Response - 8/13/97: Separate no action documentation has been prepared and has been circulated for Agency review since last fall. A briefing can certainly be arranged.
No Action Element	CALFED has clarified that existing conditions and No Action would assume that the Accord/1995 State water quality standards are in place. (D-1485 will not be in the existing conditions analysis. However, among the water users there is a perception that the Program will make up recent regulatory water costs). Do the baseline conditions being used for the Program match conditions identified for other federal agency NEPA documents? Each agency should address this issue.	Various Agencies, <i>ClubFed</i> <i>Retreat</i>	4/23/97	
No Action Element	How should implementation of CVPIA (b)92) be represented in the Program Plan? What level of implementation is appropriate for existing conditions? How should implementation be shown in No Action? These implementation issues are unresolved for existing conditions and No Action analyses: How long can the CALFED Program wait on answers to these questions? Because of consequences for cost distribution, Western is concerned that there be a clear distinction between actions implemented through CVPIA, versus the CALFED Program.	Various Agencies, <i>ClubFed</i> <i>Retreat</i>	4/23/97	

D-035120

DRAFT
Comments from CALFED Agencies
Appendix B - May 13, 1997 Version

Topic	Comment	Person/ Agency	Date	Response
General	Overall this program seems like a reasonably comprehensive proposal. Note its format seems quite different than that of the Ecosystem Plan. Most of its specific strength comes from Performance Measures rather than from Objectives and Targets. Many of the Performance Measures are specific, but others are too general, e.g., those that simply say something like "reduce some pollutant effect" need to be quantified.	DFG	6/6/97	<p><i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i></p> <p>CALFED Response - 8/12/97: Effort will be made to provide more specific Performance Measures, realizing that further prefeasibility evaluations will be required in some cases to enable quantification.</p> <p>12/19/97: Performance measures will be quantified, where possible, in the Water Quality Program Plan.</p>
General	We need to consider further how to address the question of disposal of salts. This is a key issue in the San Joaquin Valley water quality/drainage strategy paper.	Various, USEPA	5/29/97	<p><i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i></p> <p>12/19/97: Comment noted.</p>

DRAFT
Comments from CALFED Agencies
Appendix B - May 13, 1997 Version

Topic	Comment	Person/ Agency	Date	Response
General	Construction of tide gates or dams in the Old River area seem to conflict with the CALFED principle of not redirecting significant negative impacts.	Tom Maurer, USFWS	6/5/97	<p><i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i></p> <p>CALFED Response - 8/12/97: Taken by themselves, barriers in the Delta would generally have the characteristic of improving water quality in some areas at the expense of other areas. Therefore, the possibility of redirected impacts is an important consideration. As is the case with dilution actions, it is contemplated that such actions would be taken only in concert with other actions, and only when the net result would be water quality improvement or at least no worsening. Including barriers was a result of stakeholder input, and though it may have limited applicability, this potential tool should not be discarded out of hand, and should be evaluated for its potential to become a component part of comprehensive solutions.</p>
General	We need to understand the problem assessments underlying the actions prescribed. We need to clarify what modeling will be done for water quality beyond flows. What models will be used in the Delta? Some actions have been restricted from original scope (Example: land retirement). The program needs to explain where there are circumstances of incomplete, unavailable information which preclude more definitive action. The program element should also explain which methods have been considered but rejected for various reasons (Example, land retirement for salinity control). In some cases, we may be able to provide more substance (information on problems, criteria, potential methods, actions).	Various, USEPA	5/29/97	<p><i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i></p> <p>12/19/97: A Water Quality Implementation Plan will be developed as part of Phase III of CALFED. The Plan will provide greater specificity on actions, identify a mechanism for prioritization, and identify implementing entities.</p>

DRAFT
Comments from CALFED Agencies
Appendix B - May 13, 1997 Version

Topic	Comment	Person/ Agency	Date	Response
Actions	There are indicators of success which may not adequately monitor the action(s) being taken. In a number of actions, improved survival of test organisms is the only indicator. Given the scientific uncertainty of such a method, we suggest expanding this list in number and detail.	USBR	6/6/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> CALFED Response - 8/12/97: We agree that toxicity testing is an imperfect measurement tool. We will consider whether other performance measures can be used in addition to toxicity measurements. However, direct measurements of toxicants also suffers limitations due to incomplete understanding of the relationship of concentrations to observed biological effects.
Actions	Given the linkages between recycled water and water quality, it would be useful to include potential water use efficiency actions that are consistent with the water quality program.	USBR	6/6/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> CALFED Response - 8/12/97: The document will incorporate discussion of the linkages between water use efficiency and water quality actions. Water use efficiency actions are generally not, however, directed only to water quality improvement and, in fact, may in some cases work to the disadvantage of water quality. We believe water use efficiency actions should be identified as such, as compared to being included as water quality actions. Still, the potential for water quality improvement due to water use efficiency actions will be highlighted.
Actions	It appears that the performance measures are not all consistent with the specified actions. As an example, reducing the amount of toxicity in a river (performance measure) may not reduce the <u>effects</u> of certain toxins (action).	USBR	6/6/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> CALFED Response - 8/12/97: Performance measures will be examined for consistency with the actions. The example cited in the comment is unclear, though. Because a toxicity bioassay is a direct measurement of toxic effect, is not a reduction of toxicity equivalent to a reduction of the effect?

D - 0 3 5 1 2 3

DRAFT
Comments from CALFED Agencies
Appendix B - May 13, 1997 Version

Topic	Comment	Person/ Agency	Date	Response
Ammonia	I am not aware of much data suggesting ammonia from dairies or agricultural field fertilization is much of a water quality problem in the Delta or main Central Valley waterways. I do not believe that ammonia objectives will be promulgated as part of the EPA 304(a) list; there is a published EPA ammonia criteria document though.	Chris Foe, CVRWQCB	5/13/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 11/21/97: Ammonia is listed as a parameter of concern; however, it can be re-evaluated by the Parameter Assessment Team for deletion from the list.
Indicators of Success	There are lists of indicators of success which may not adequately monitor the action(s) being taken. Given the scientific uncertainty we again suggest an expansion of the list of indicators both in number and in detail. There is also a need to describe the prioritization of alternatives with regard to water quality.	USBR	9/25/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> CALFED Response - 8/12/97: We agree that toxicity testing is an imperfect measurement tool. We will consider whether other performance measures can be used in addition to toxicity measurements. However, direct measurements of toxicants also suffers limitations due to incomplete understanding of the relationship of concentrations to observed biological effects. 11/21/97: A Water Quality Implementation Plan will be developed as part of Phase III of CALFED. The Plan will provide greater specificity on actions, identify a mechanism for prioritization, and identify implementing entities.
Performance Measures	We believe performance measures should be linked to the actions in such a manner useful for evaluation. We wish to reiterate our belief that the number of public workshops and other outreach activities is not an adequate scientific measure of the action to reduce the impacts associated with recreation water use and domestic waste (outreach is an "action" only "results" can be measured). CALFED should assess the utility of toxicity testing and the documents should stress the limitations of toxicity testing and apply this method only when appropriate.	USBR	9/25/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> CALFED Response - 8/12/97: We agree that numbers of educational events are not a good measurement of the effectiveness of reducing recreational/domestic impacts. Realizing that non-point source pollution is difficult to measure, it seems unlikely that it will be possible to directly measure the effectiveness of the action. The document will be revised to indicate that measures of program effectiveness, such as public opinion/public awareness surveys will be used to quantitatively estimate the effectiveness of raising public consciousness about these forms of pollution.

D - 0 3 5 1 2 4

DRAFT
Comments from CALFED Agencies
Appendix B - May 13, 1997 Version

Topic	Comment	Person/ Agency	Date	Response
Mine Drainage Actions	Under the action to reduce toxic effects of mercury, we recommend that the achievement of U.S. EPA 304(a) guidelines for the delta be expanded and the amount of reduction of mercury concentrations included.	USBR	6/6/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> CALFED Response - 8/12/97: 304(a) guidelines will be examined for their applicability. A question to be answered is whether it will be feasible to realistically quantify the reduction of mercury without considerable further study.
Mine Drainage Actions	Page 2: The beneficial use impairment is caused by mercury bioaccumulating in long-lived species of fish resulting in consumer advisories. Sources and relative bioavailability need to be understood. It seems premature to conclude that mines are the only and best place to control loadings. The action should say: Initiate program to update the existing advisory for fish consumption and reduce levels in fish below concentrations known to cause human health effects by reducing bioavailable mercury loadings to the Delta and its tributaries through source control.	Chris Foe, CVRWQCB	5/13/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 12/19/97: CALFED is not a regulatory body. Fish advisories are developed by agencies other than CALFED. Mercury has been identified by the program as a parameter of concern needing better assessment and monitoring to determine its sources and bioavailable forms.
Mine Drainage Actions	Action 1, Page 1: Periodic invertebrate water column toxicity is seen in bioassays below Shasta dam which have been traced through TIEs to zinc. The problem seems to occur when wet winter follows a dry water year. Perhaps zinc being resuspended from reservoir sediment. I know of no data that copper run-off from applications on orchards or rice caused toxicity in water column bioassays. I know of no research demonstrating elevated body burden levels of these three metals cause detrimental effects to either the organisms or higher trophic levels (people or wildlife). Therefore, you may not want to list this as an indication of success. Metals should be listed as a high priority research area since there is almost no information on toxicity of central Valley and Delta sediments on aquatic organisms.	Chris Foe, CVRWQCB	6/30/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 12/19/97: The USFWS provided us with the comment on tissue level concentrations in aquatic organisms for these metals.

D-035125

DRAFT
Comments from CALFED Agencies
Appendix B - May 13, 1997 Version

Topic	Comment	Person/ Agency	Date	Response
Mine Drainage Actions	Action 2, Page 2: There are three sources: old mercury mines in the coast range (Cache Creek and Mt. Diablo), hydraulic mining debris in Sierras, and mercury in eroded sediment.	Chris Foe, CVRWQCB	6/30/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 12/19/97: Actions to address mercury include the development of a system-wide research program to identify bioavailable forms of mercury, sources of bioavailable forms, and factors contributing to bioavailability.
Mine Drainage Actions	Page 1: This action seems to be directed at the Iron Mountain Mine. CALFED agencies at the top level need to decide policy with respect to IMM. CALFED involvement should be carefully considered as current cleanup activities are progressing, improvements have been made and are continuing.	Tom Maurer, USFWS	6/5/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> CALFED Response - 8/12/97: While Iron Mountain Mine is an important element of the acid mine drainage problems affecting the Delta Estuary and its species, it is not the only abandoned mine of interest with respect to cadmium, copper, and zinc. With respect to remediation of these mines, CALFED management will maintain an awareness of ongoing activities and seek opportunities to contribute to solutions while avoiding complex problems such as toxic site liability and litigation.
Mine Drainage Actions	Page 2: The method for development of a program to identify bioavailable forms of mercury seems an unnecessary delay. There is no known data that indicates mercury, in any form, is not bioavailable. This research program should not serve as a reason to delay acting upon mercury sources.	Various, USEPA	5/29/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 12/20/97: Research on mercury will serve to ensure that actions taken by CALFED are targeted at the proper sources. Monitoring and research will not delay actions but rather will ensure the availability of data for adaptive management.
Mine Drainage Actions	Page 2: Methods should include identifying activities in watersheds that may promote the methylation of mercury (e.g., pit gravel mining, creating other anaerobic situation including reservoir construction). This may be implied but is not clearly stated as an important method separate from identifying sources..	Tom Maurer, USFWS	6/5/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> CALFED Response - 8/12/97: The document will be altered to mention identification of activities that may promote methylation of mercury.

DRAFT
Comments from CALFED Agencies
Appendix B - May 13, 1997 Version

Topic	Comment	Person/ Agency	Date	Response
Mine Drainage Actions	Page 2: Explain where mine drainage presents a problem for the ecosystem and/or human health. Be specific regarding the reaches of rivers, streams affected. Cross check the water quality component assessment with references in ERPP relating toxic contaminants.	Various, USEPA	5/29/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> CALFED Response - 8/12/97: The Affected Environment section describes and shows locations of mine drainage problems.
Urban and Industrial Runoff Actions	Page 3: The indicators of success for the action addressing toxicity from pesticides and chlorpyrifos should cite DFG criteria.	Various, USEPA	5/29/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> CALFED Response - 8/12/97: DFG will be cited. There is disagreement among the Water Quality Technical Group regarding the applicability of DFG criteria versus basin plan objectives.
Urban and Industrial Runoff Actions	Page 3: In the action to reduce the toxic effects of nutrient loadings and consequently, <u>oxygen depletion</u> in the Delta and its tributaries through source control of urban and industrial runoff, the oxygen depletion is limited to a specific area in the San Joaquin. We are not aware of other areas with this problem, making it a specific issue rather than a program one. Source control may be an option since the problem is related to discharge from a particular plant. This should be checked with Terry Oda and with the Regional Board. We should check the CZARA measures applicable to these problems. Could these measures be incorporated here by reference? The provision for incentives referenced as a method is out of place and should be moved to a later section addressing discharges. The Indicator of Success references Basin Plan Objectives; is there really a widespread problem with dissolved oxygen?	Various, USEPA	5/29/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> CALFED Response - 8/12/97: Dissolved oxygen depletion from the Stockton discharge is very well known. The city will be required to address the problem by regulatory order; therefore, an action to address the dissolved oxygen depletion from that source is not contemplated under the CALFED program. (Correction of this problem is not, however, assumed as part of the No Action Alternative because details have not yet been finalized). We believe it has not been demonstrated that the treatment plant is solely responsible for this problem; storm drainage to the area and flow patterns in the area are considered to possible contributing factors.

D-035127

DRAFT
Comments from CALFED Agencies
Appendix B - May 13, 1997 Version

Topic	Comment	Person/ Agency	Date	Response
Urban and Industrial Runoff Actions	Page 4: The action to reduce the sediment loading and subsequent turbidity is written from the perspective of a drinking water supply objective. There is reason to believe that a reason things have gone wrong environmentally is the Delta has become too clear from an aquatic ecosystem perspective. Thus this section may be in conflict with ecosystem restoration objectives. That issue needs to be recognized and addressed	DFG	6/6/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 12/20/97: The issue of sediment and turbidity in the Delta is a long standing controversy between stakeholders. Water quality actions are intended to further the Water Quality Program's goal of providing good water quality for all beneficial uses; environmental, agricultural, drinking water, industrial and recreational. The program seeks to limit conflicts and balance beneficial uses.
Urban and Industrial Runoff Actions	Page 4: The action should include an agricultural component relating to sediment loading and turbidity unless assessment indicates there is no problem for the ecosystem. The current text refers only to urban and industrial sources.	Various, USEPA	5/29/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> CALFED Response - 8/12/97: We will evaluate whether sediment loading and turbidity should be included as an agricultural component. 12/20/97: The Water Quality Program Plan has included an action to address sediment from agricultural sources.

D - 0 3 5 1 2 8

DRAFT
Comments from CALFED Agencies
Appendix B - May 13, 1997 Version

Topic	Comment	Person/ Agency	Date	Response
Urban and Industrial Runoff Actions	Page 3: The goal should be to <u>eliminate</u> toxicity from the pesticides chlorpyrifos and diazinon not <u>reduce</u> toxicity. Development and outreach or practical long term alternatives would be better than incentives. I do not believe there is much knowledge yet about the practices responsible for major off site movement of urban pesticides. There should be development of alternate pest management practices once sources are identified. The target for urban pesticides should not be to eliminate toxicity to Ceriodaphnia, the most sensitive of the species, because literature suggests that Ceriodaphnia is not likely to be the most sensitive in our receiving water. Action should include increasing the understanding of the ecological significance, sources and mechanisms of chlorpyrifos and diazinon transport into the Delta; development of urban best management practices, including integrated pest management, to reduce off site movement of pesticides from primary sources; development of outreach programs to educate urban pesticide users about new BMPs; and, determine an acceptable pesticide target to insure that the ecological health of aquatic community is protected. Performance measures should eliminate the threat of toxicity at selected stormwater monitoring locations by comparing instream pesticide concentrations to newly developed target. The indicator of success should be the elimination of toxicity from chlorpyrifos and diazinon from the Delta and its tributaries. The actions, methods, performance measures and indicators of success should be as similar to agricultural drainage as possible to avoid the appearance of treating them differently.	Chris Foe, CVRWQCB	5/13/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 11/21/97: Comment incorporated into the WQPP.
Urban and Industrial Runoff Actions	Action 4, Page 3: I do not understand the distinction between acute and chronic toxicity. Both can be potentially disastrous to aquatic populations. It should read "reduce synthetic organic compound toxicity in surface water to protect aquatic life." Research is needed to establish the ecological significance of the elevated pesticide concentrations to local populations.	Chris Foe, CVRWQCB	6/30/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 12/20/97: Toxicity tests can measure both acute and chronic affects. Reduced toxicity is a performance measure for the action addressing chlorpyrifos and diazinon from urban and industrial runoff in the WQPP.

DRAFT
Comments from CALFED Agencies
Appendix B - May 13, 1997 Version

Topic	Comment	Person/ Agency	Date	Response
Urban and Industrial Runoff Actions	Action 5, Page 3: The problem statement should clarify that there are two problems. One is a dissolved oxygen sag in Stockton back sloughs after the first flush. This results in annual shad kills and eliminates predatory fish from back sloughs like Smith Canal. This may not be important ecologically, but it is a very heavily fished waterway and the public would probably appreciate having the problem fixed. Second is the annual oxygen sag which develops off Rough and Ready Island each fall. This may obstruct the fall salmon migration. The sag is caused by excess nitrogen from upstream on the San Joaquin and from cannery waste discharged to the regional wastewater treatment plant coupled with reduced flows and increased water residence time in the southern delta. The problem is being addressed by the upgrade at the Regional Plant.	Chris Foe, CVRWQCB	6/30/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 12/20/97: Both low dissolved oxygen problems are covered by the action "Reduce the toxic effects of oxygen depletion in the Delta (specifically near Stockton) through source control of urban and industrial runoff" in the WQPP.
Urban and Industrial Runoff Actions	Page 3: References such as (see also agricultural drainage) should be added in each action item to provide cross reference to related actions. This would be useful for all parameters that are covered under different sources (i.e., cadmium under mine drainage and urban/industrial).	Tom Maurer, USFWS	6/5/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> CALFED Response - 8/12/97: The document will be amended to cross reference related actions.
Urban and Industrial Runoff Actions	Under the action to reduce the toxic effects of nutrient loadings, a more detailed explanation of the indicator of success (achievement of the Basin Plan Objectives) would be helpful.	USBR	6/6/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 12/20/97: The explanation was expanded to facilitate the reader's understanding.

DRAFT
Comments from CALFED Agencies
Appendix B - May 13, 1997 Version

Topic	Comment	Person/ Agency	Date	Response
Urban and Industrial Runoff Actions	We continue to believe that the increase in juvenile fish is an inappropriate performance measure for reduction of sediment loading and turbidity.	USBR	9/25/97	<p><i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i></p> <p>CALFED Response - 8/12/97: We agree that it is not likely that changes in anadromous fish production will be directly linked to changes in sediment loading and turbidity. Direct measurements of sediment loading and turbidity can be made and should be the primary means of determining the effectiveness of control actions. Perhaps, however, it is a good idea to look at fish production as a collective measure of the effectiveness of all actions affecting the fish. We will consider modifying the language accordingly.</p>
Urban and Industrial Runoff Actions	Under the action to reduce impacts of sediment loading and subsequent turbidity, one of the performance measures includes the increase of juvenile anadromous fish production. Since there is no direct way of measuring the effects of sediment loading by the increase of juvenile anadromous fish production, we suggest this measure either be removed from the list or included in parameters possibly linked to fish production.	USBR	6/6/97	<p><i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i></p> <p>CALFED Response - 8/12/97: We agree that it is not likely that changes in anadromous fish production will be directly linked to changes in sediment loading and turbidity. Direct measurements of sediment loading and turbidity can be made and should be the primary means of determining the effectiveness of control actions. Perhaps, however, it is a good idea to look at fish production as a collective measure of the effectiveness of all actions affecting the fish. We will consider modifying the language accordingly.</p>

DRAFT
Comments from CALFED Agencies
Appendix B - May 13, 1997 Version

Topic	Comment	Person/ Agency	Date	Response
Wastewater and Industrial Discharges Actions	We believe that performance measures should be linked to the actions in such a manner which is useful for evaluation. We do not believe that the number of public workshops and other outreach activities is an adequate measure for the action to reduce the impacts of recreational water use and domestic waste.	USBR	6/6/97	<p><i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i></p> <p>CALFED Response - 8/12/97: We agree that numbers of educational events are not a good measurement of the effectiveness of reducing recreational/domestic impacts. Realizing that non-point source pollution is difficult to measure, it seems unlikely that it will be possible to directly measure the effectiveness, such as public opinion/public awareness surveys will be used to quantitatively estimate the effectiveness of raising public consciousness about these forms of pollution.</p> <p>12/22/97: Comments incorporated into the WQPP.</p>
Wastewater and Industrial Discharges Actions	Page 4-: Would expansion of boat discharge actions to upstream reservoirs also improve river water quality thus ultimately Delta water quality?	Tom Maurer, USFWS	6/5/97	<p><i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i></p> <p>CALFED Response - 8/12/97: Discharges from boats in upstream reservoirs are generally much better controlled than is the case for boats in the Delta. The document will be amended to indicate that as part of the boat discharge control program, control programs on reservoirs will be evaluated and augmented as needed. It will also be indicated that priority will be given to the Delta.</p> <p>12/20/97: Comments incorporated into the WQPP.</p>

DRAFT
Comments from CALFED Agencies
Appendix B - May 13, 1997 Version

Topic	Comment	Person/ Agency	Date	Response
Wastewater and Industrial Discharges Actions	Page 4: Consider developing a program that phases in a ban on boat discharges, after gradually providing access to plentiful and affordable pumpout facilities throughout the Delta. This could still be completed by increased education, enforcement, etc.	Various, USEPA	5/29/97	<p><i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i></p> <p>12/20/97: The CALFED Bay-Delta Program is not a regulatory body. There are other agencies and regulatory authorities that regulate boat discharges and would be more appropriate entities for banning boat discharges.</p>
Wastewater and Industrial Discharges Actions	Page 4: Impact of wastes and pathogens is largely associated with contact via recreational use. It is not a problem for drinking water since treatment addresses these contaminants. Further, we are not aware of environmental issues associated with these wastes. Rewrite the action statement and indicators to emphasize the recreation use. There are hot spots within the delta where the recreation impact is pronounced, and these should receive priority attention (for example, Grant Line slough/canal).	Various, USEPA	5/29/97	<p><i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i></p> <p>CALFED Response - 8/12/97: We agree that pathogens present health risks to recreational users and this effect should receive greater emphasis. We disagree that "For drinking water, treatment addresses these contaminants: in an absolute sense. Recent disease outbreaks in places such as Milwaukee, WI and Las Vegas, NV have demonstrated that even modern, well operated facilities can in some cases fail to adequately disinfect the water and prevent disease. The development by EPA of the Enhance Surface Water Treatment Rule is a clear demonstration of this understanding and of the perception that more must be done to protect the public. Studies are underway throughout the country, including in the Delta, but results to date are inconclusive. Accordingly, we believe the action statement should retain an acknowledgment of this potential problem.</p> <p>12/10/97: No change needed in the WQPP.</p>

D - 0 3 5 1 3 3

DRAFT
Comments from CALFED Agencies
Appendix B - May 13, 1997 Version

Topic	Comment	Person/ Agency	Date	Response
Wastewater and Industrial Discharges Actions	Page 5: Selenium dischargers should be included with copper and mercury at Suisun Bay and Carquinez Straits area. Performance measures should include reduction in selenium loadings from industrial dischargers. Indicators of success should be removal of health advisories, decrease in bird, fish and mussel selenium levels to levels protective of wildlife.	Tom Maurer, USFWS	6/5/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> CALFED Response - 8/12/97: Control of selenium discharges in the Suisun Bay and Carquinez Straits areas is already a separate action. 11/21/97: No change needed in the WQPP.
Wastewater and Industrial Discharges Actions	Page 5: The action to reduce toxic impacts of selenium, the "Western Delta" should refer to the area upstream of Chipps Island and should not include Suisun Bay. Refinery releases probably do affect Suisun, but not the western Delta. Indicators of success should refer to reducing bioaccumulation of selenium in organisms of the Suisun Bay (rather than the Western Delta).	Various, USEPA	5/29/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> CALFED Response - 8/12/97: Recommendations accepted. 11/21/97: Comment incorporated into the WQPP.
Wastewater and Industrial Discharges Actions	Page 5: Upon a quick reading, the action related to oxygen, copper and mercury seems to overlap with earlier sections on the same substances.	DFG	6/6/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> CALFED Response - 8/12/97: The document will be examined to determine whether redundancy exists and can be eliminated.

D - 0 3 5 1 3 4

DRAFT
Comments from CALFED Agencies
Appendix B - May 13, 1997 Version

Topic	Comment	Person/ Agency	Date	Response
Agricultural Drainage Actions	Same comments for agricultural pesticides as for urban pesticides: "The goal should be to <u>eliminate</u> toxicity from the pesticides chlorpyrifos and diazinon not <u>reduce</u> toxicity. Development and outreach or practical long term alternatives would be better than incentives. I do not believe there is much knowledge yet about the practices responsible for major off site movement of urban pesticides. There should be development of alternate pest management practices once sources are identified. The target for urban pesticides should not be to eliminate toxicity to Ceriodaphnia, the most sensitive of the species, because literature suggests that Ceriodaphnia is not likely to be the most sensitive in our receiving water. Action should include increasing the understanding of the ecological significance, sources and mechanisms of chlorpyrifos and diazinon transport into the Delta; development of urban best management practices, including integrated pest management, to reduce off site movement of pesticides from primary sources; development of outreach programs to educate urban pesticide users about new BMPs; and, determine an acceptable pesticide target to insure that the ecological health of aquatic community is protected. Performance measures should eliminate the threat of toxicity at selected stormwater monitoring locations by comparing instream pesticide concentrations to newly developed target. The indicator of success should be the elimination of toxicity from chlorpyrifos and diazinon from the Delta and its tributaries." The actions, methods, performance measures and indicators of success should be as similar to agricultural drainage as possible to avoid the appearance of treating them differently.	Chris Foe, CVRWQCB	5/13/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality</i> <i>Actions as:</i> 12/22/97: Comment incorporated into the WQPP.
Agricultural Drainage Actions	The treatment or removal of selenium is still in the experimental phase and listing it as a method to reduce the toxic effect of selenium could be misleading.	USBR	6/6/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality</i> <i>Actions as:</i> CALFED Response - 8/12/97: The document will be revised to indicate treatment methodologies are experimental. 12/22/97: Statement incorporated into the WQPP that treatment or removal of selenium is in the experimental phase.

DRAFT
Comments from CALFED Agencies
Appendix B - May 13, 1997 Version

Topic	Comment	Person/ Agency	Date	Response
Agricultural Drainage Actions	Actions with methods such as use of evaporation ponds for drainage impoundment are not highly recommended. We suggest listing technologies that are well known to be safe.	USBR	6/6/97	<p><i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i></p> <p>CALFED Response - 8/12/97: We agree that use of impoundments that concentrate inorganic constituents have considerable potential for ecological risk, and should generally not be advocated. Yet, use of such approaches was identified through our public participation process as being possibly appropriate in some circumstances. Rather than be faced with the necessity of rejecting stakeholder recommendations in this matter, we believe the preferred approach is to list the method, but also include discussion of the very real limitations and problems that would be associated with its employment.</p> <p>12/22/97: The limitations of evaporation ponds is noted in the WQPP.</p>
Agricultural Drainage Actions	It is unclear if timed release of pollutant discharges will require new/additional storage facilities for these pollutants. If so, it is important to consider how viable this option is given the situations that have arisen with Kesterson Reservoir and Carson Sink.	USBR	6/6/97	<p><i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i></p> <p>CALFED Response - 8/12/97: We agree that, if timed release actions would require surface storage facilities, the problem discussed in the above comment would pertain. Our approach will be to include this caveat in the document.</p>
Agricultural Drainage Actions	Page 5: Should oxygen depletion due to nutrient loading also be included under this source? Also, sediment loading due to farming and logging would seem appropriate here.	Tom Maurer, USFWS	6/5/97	<p><i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i></p> <p>CALFED Response - 8/12/97: We will evaluate nutrient and sediment loading for inclusion under agricultural drainage; sediment loading due to farming and logging will also be evaluated.</p>

DRAFT
Comments from CALFED Agencies
Appendix B - May 13, 1997 Version

Topic	Comment	Person/ Agency	Date	Response
Agricultural Drainage Actions	Page 5: In the action regarding reduction of selenium loading, the three methods listed will not necessarily reduce selenium loads. While water use efficiency in the Grasslands region has increased from 60 to 80 percent, selenium loads have still increased as more land have come into production. We support the concept of reducing loadings and suggest a broadening of methods be considered to include economic incentives such as tiered water pricing and tradable discharge permits. Consideration should be given to the entire Grasslands watershed and activities that may address selenium sources in the upper watershed. The methods should add developing and implementing a TMDL; incorporating the provisions of the Grasslands Bypass Use agreement; and adopting and implementing a waste discharge requirement. The indicators should refer to reduced selenium loads. This could be measured closer to the source and impact areas such as Mud Slough, although Vernalis is acceptable as well (monitoring data available). We were not certain of the distinction between the performance measure and the indicator of success, which appears to be another performance measure without ultimate ecosystem relationship. Tissue concentrations should refer to Bay-Delta species.	Various, USEPA	5/29/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> CALFED Response - 8/12/97: A founding principle of CALFED was the concept of providing incentives for voluntary, cooperative actions, with reduced emphasis on compulsory approaches. TMDLs, Waste Discharge Requirements, etc., must, necessarily, be a part of the overall picture, but should be employed where voluntary, incentive based efforts are ineffective. While regulatory actions are part of the mix, we emphasize cooperative alternatives over regulatory enforcement.
Agricultural Drainage Actions	Page 6: The action regarding salinity in the South Delta. The document should provide some documentation whether or not the state methods actually reduce salinity loads entering the South Delta as stated in performance measures (i.e., some could decrease concentrations but not loads).	DFG	6/6/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 12/20/97: Comment incorporated into the WQPP.
Agricultural Drainage Actions	Page 6: Other indicators of success can be decrease of selenium concentrations in biota, achieve Basin Plan and EPA objectives for selenium in the San Joaquin River.	Tom Maurer, USFWS	6/5/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> CALFED Response - 08/12/97: Indicators will be shown.

DRAFT
Comments from CALFED Agencies
Appendix B - May 13, 1997 Version

Topic	Comment	Person/ Agency	Date	Response
Agricultural Drainage Actions	Page 6: Storing or using water with the explicit intent of diluting a pollutant is inconsistent with federal and state laws, and in conflict with the water use efficiency program objectives of CALFED. Water quality action items which specifically recommend purchasing water with the intent to dilute pollutants were discussed in several water quality team meetings. Although these action items received low priorities from the water quality teams, they remain on the list. The ecosystem water quality team was opposed to including dilution action items but agreed to leave them only as possible emergency actions for spill response or uncontrollable discharges. The distinction has not been noted. Proposing such action items on dilution is inappropriate and will certainly attract severe criticism during the PEIS review.	Tom Maurer, USFWS	6/5/97	<p><i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i></p> <p>CALFED Response - 8/12/97: The Ecosystem, Urban, and Agricultural water quality teams all identified dilution actions as low priority, and this type of action appears on the list only in reference to dilution of salinity, not other pollutants. While dilution actions certainly could have the result of increasing salinities in certain locations. It is conceivable that some form of dilution action might be appropriate to mitigate salinity impacts in limited circumstances. Such actions would be taken only in combination with other actions, and only where the overall result would be no net unreasonable use of water or water quality degradation. 2) The action is a product of stakeholder input, and we do not feel it can be rejected out of hand.</p> <p>12/22/97: Water quality concerns associated with dilution are noted in the WQPP.</p>

DRAFT
Comments from CALFED Agencies
Appendix B - May 13, 1997 Version

Topic	Comment	Person/ Agency	Date	Response
Agricultural Drainage Actions	Page 6: In the action regarding reduction of salinity impacts to Delta urban and agricultural source water, the method regarding reverse osmosis does not appear to be a viable, cost-effective solution. By what mechanisms do constructed wetlands remove salts? The performance measure focuses on reduced salinity loads entering the San Joaquin River; however, the fourth method that suggests timing the discharges with high flow conditions will not have an impact on salt loadings (just on concentrations). On salinity reduction, check with Dennis Westco or a similar expert at the Regional Board. Methods should include land retirement or an explanation why this method was rejected. Management for in-valley solutions should be emphasized.	Various, USEPA	5/29/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> CALFED Response - 8/12/97: (1) We agree reverse osmosis does not appear to be a viable, cost effective solution at this time. This methodology was recommended through our public participation process in realization that new technological developments have occurred that have reduced the cost of this method of treatment, and the expectation that further improvements could be possible in the future. (2) The document will be amended to avoid creating the impression that constructed wetlands are expected to remove salts. (3) We agree changing timing of flows will affect only concentrations, not loads. This will be stated.
Agricultural Drainage Actions	Page 6: In the action regarding reduction of salinity in the South Delta, the separate entry should be deleted as it refers to dilution actions, rerouting pollution, and structure options which are included in certain of the 17 alternatives. These measures are inappropriate for the water quality common element. To the extent that salinity in the South Delta is a problem, it should be noted in the action immediately proceeding. Source control methods are appropriate in the common element, but not the methods associated in this action (such as tide gates). If the CALFED alternatives do adversely affect the South Delta, mitigation measures such as those suggested here (barriers, additional water supplies) may be considered. (Again, note that the barriers are included in some of the storage and conveyance alternatives. These may not be necessary to the performance of the storage/conveyance facilities, but more associated with impact mitigation).	Various, USEPA	5/29/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> CALFED Response - 8/12/97: Salinity problems peculiar to the South Delta will be more fully described.

D-035139

DRAFT
Comments from CALFED Agencies
Appendix B - May 13, 1997 Version

Topic	Comment	Person/ Agency	Date	Response
Agricultural Drainage Actions	Page 7: Regarding the action to reduce the toxic effects of carbofuran, chlorpyrifos, and diazinon, there are DFG criteria which can be cited in the indicators of success. Ascertain why only three of five pollutants (in rice field water quality issues) are cited here. Check with Debra Denton.	Various, USEPA	5/29/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> CALFED Response - 8/12/97: DFG criteria will be cited. 12/20/97: The applicability of DFG criteria is a subject of disagreement among the Water Quality Technical Group stakeholders.
Agricultural Drainage Actions	Page 7: Action regarding ammonia. Clarify the geographic incidence of this problem. Dan Meer or someone such as Chris Foe at the Regional Board might be able to explain if ammonia is a problem?	Various, USEPA	5/29/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 12/20/97: Nutrient loadings to the Delta from agricultural runoff have been identified by Water Quality Technical Group stakeholders including the USFWS.
Agricultural Drainage Actions	Action 13, Page 7: Ammonia concentrations discharged from sewage treatment plants with minimal dilution can be high enough to kill fathead minnows in acute bioassays and may be at concentrations negatively impacting other warmwater fish.	Chris Foe, CVRWQCB	6/30/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 12/20/97: Comment noted.
Water Treatment Actions	Page 8: Consider adding to the action "Improve total organic carbon, pathogens, turbidity and bromides at domestic water supply intakes" a second method as follows: Reduce Delta Island discharges that are high in TOC or other compounds that may impact source water quality.	Mary Dunne, DFG	6/2/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 11/25/97: Comment incorporated into the WQPP.
Water Treatment Actions	Page 8: The action relating to improved quality of treat drinking water. There needs to be further thinking on appropriate actions. We cannot agree that the incentives listed under methods are appropriate.	Various, USEPA	5/29/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> CALFED Response - 8/12/97: The actions will receive further consideration and discussion among stakeholders.

D - 0 3 5 1 4 0

DRAFT
Comments from CALFED Agencies
Appendix B - May 13, 1997 Version

Topic	Comment	Person/ Agency	Date	Response
Water Treatment Actions	Page 8: The action regarding TOC and other problems. This needs clarification of the problems and rewrite of the methods. Bromides, for example, are not discharges. Relocating the water supply intakes may not be appropriate. (Note, however, that this is included in many of the 17 alternatives).	Various, USEPA	5/29/97	<p><i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i></p> <p>CALFED Response - 8/12/97: The report will be amended to indicate bromides are not discharges and other portions rewritten for clarity as required.</p> <p>10/20/97: Met with Rick Woodard to discuss the fact that this conflicts with USBR comments. Rick contacted USBR and USEPA regarding the conflict. Resolution of conflict unknown as of 12/23/97.</p>
Unknown Toxicity Actions	Page 9: This is genuinely a problem but the common element write up is vague. Run this by Debra Denton.	Various, USEPA	5/29/97	
Unknown Toxicity Actions	The phrase "Unknown Toxicity" needs more explanation for adequate evaluation of the actions recommended.	USBR	6/6/97	<p><i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i></p> <p>CALFED Response - 8/12/97: "Unknown Toxicity" has been used to refer to observed toxicity that has not been traced to any particular toxic agent. This terminology is confusing and needs to be improved. Perhaps "toxicity due to unknown causes" would be better. We will work on it.</p> <p>12/22/97: The term "toxicity of unknown origin" has replaced "unknown toxicity" in the WQPP to facilitate the reader's understanding of the issue.</p>

D - 0 3 5 1 4 1

DRAFT
Comments from CALFED Agencies
Appendix B - May 13, 1997 Version

Topic	Comment	Person/ Agency	Date	Response
Unknown Toxicity Actions	I rewrote this action as follows: Implement actions to identify and eliminate toxicity in water and sediment within the Delta and its tributaries. The method should include development of a comprehensive surface and sediment toxicity program using both the standard EPA 3 test and several local organisms; Conduct Toxicity Identification Evaluations and/or other directed studies to determine the chemical cause, source(s), and ecological significance of the toxicity; develop and implement control actions to eliminate all ecologically significant toxicity; and, coordinate efforts with other monitoring programs. Performance measures should include a number of bioassays and successful Toxicity Identification Evaluations conducted and identification and successful implementation of control measures to reduce identified toxicants. The indicator of success should be elimination of all significant toxicity in the Delta and its tributaries.	Chris Foe, CVRWQCB	5/13/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 12/20/97: Comment incorporated into the WQPP.
Unknown Toxicity Actions	Action 18, Page 9: Half the samples collected in the upper watershed test toxic in bioassays. More follow-up studies should be undertaken for unknown toxicants.	Chris Foe, CVRWQCB	6/30/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 12/20/97: Comment noted.
Unknown Toxicity Actions	Some actions are quite vague (Example: unknown toxicity).	Various, USEPA	5/29/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> CALFED Response - 8/12/97: The report, when completed, will contain this information to the extent practicable. 12/22/97: The term "toxicity of unknown origin" has replaced "unknown toxicity" in the WQPP to facilitate the reader's understanding of the issue.

D-035142

DRAFT
Comments from CALFED Agencies
Appendix B - May 13, 1997 Version

Topic	Comment	Person/ Agency	Date	Response
Water Management Actions	Page 9: The issues of dilution of salinity and whether this is an appropriate measure to reduce loads needs to be clarified.	DFG	6/6/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> CALFED Response - 8/12/97: The document will be revised to clarify whether the stated methods will reduce salinity loads, as compared to concentrations. The policy question will need to be resolved by CALFED management, as there is apparently a different view on this issue held by various CALFED agencies as well as stakeholders.
Water Management Actions	Page 9: The same comments on dilution as for Agricultural Drainage- Salinity as follows: "Storing or using water with the explicit intent of diluting a pollutant is inconsistent with federal and state laws, and in conflict with the water use efficiency program objectives of CALFED. Water quality action items which specifically recommend purchasing water with the intent to dilute pollutants were discussed in several water quality team meetings. Although these action items received low priorities from the water quality teams, they remain on the list. The ecosystem water quality team was opposed to including dilution action items but agreed to leave them only as possible emergency actions for spill response or uncontrollable discharges. The distinction has not been noted. Proposing such action items on dilution is inappropriate and will certainly attract severe criticism during the PEIS review."	Tom Maurer, USFWS	6/5/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 12/19/97: Actions associated with dilution will be taken only in concert with other actions, and only when the net result would be water quality improvement or at least not worsening. Including barriers was a result of stakeholder input, and though it may have limited applicability, this potential tool should not be discarded out of hand, and should be evaluated for its potential to become a part of comprehensive solutions.
Appendix C	Page 9: The appendix should clarify that the use of new water for environmental beneficial uses does not require "carrying out appropriate water management measures or implementing cost-effective efficiency measures."	DFG	6/6/97	<i>Appears in 12/23/97 Resolution Plan for Water Quality Actions as:</i> 12/19/97: Comment noted.

DRAFT
Comments from CALFED Agencies
Role and Policy With Respect to San Joaquin River Water Quality Problems - March 10, 1997 Version

Topic	Comment	Person/ Agency	Date	Response
General	This paper seems to be an awkward way to address the scoping issue as to whether the water quality program will address issues in the Tulare Lake basin. We endorse the recommendation that CALFED limit its scope to the San Joaquin basin. This paper does not clearly convey that intent. It does raise a number of issues (perhaps unintentionally) with regarding to addressing water quality problems in the San Joaquin basin.	USEPA	3/19/97	
Leadership Role	Page 2, last paragraph: This language should be revised to embrace a leadership role for CALFED (i.e., "CALFED will <u>involve</u> stakeholders...") It seems inappropriate to single out only one program - either other stakeholders or programs should be listed or the reference to SJVDIP should be deleted.	USEPA	3/19/97	
Parameters of Concern	Page 1, first paragraph, fourth sentence: Revise to read "parameters of concern tot he Delta, <u>and its in habitat species, and water users</u> . Add selenium to the list of constituents of concern coming from surface runoff. Delete reference to Table 1 at end of first paragraph.	USEPA	3/19/97	
Scope	CALFED's program should strive for fully addressing water quality problems and not limit its potential actions or scope only to those that are consistent with the SJVDIP. The statements that "the SJVDIP will provide the overall direction for long term solutions of these problems" for CALFED should be changed to reflect that CALFED will work with the SJVDIP and other entities to address these problems.	USEPA	3/19/97	
Scope	Page 2, bullet 3: The criteria stating "consistent with the SJVDIP and other existing water quality management and control programs" should be revised to reflect that CALFED will <u>build upon</u> existing efforts but not necessarily <u>limit</u> its activities based upon these efforts. CALFED should be defining a program that addresses the problems, not just endorsing the status quo.	USEPA	3/19/97	

DRAFT
Comments from CALFED Agencies
Role and Policy With Respect to San Joaquin River Water Quality Problems - March 10, 1997 Version

Topic	Comment	Person/ Agency	Date	Response
Solutions	Page 2, first paragraph: "Collection and disposal to ocean" is referenced as a mechanism to "permanently reduce the salt load coming into the river from agricultural activities" should be deleted. The emphasis should be on in-valley solutions that will indeed reduce the salt loads and not on transferring these wastes to another location. The inclusion of out-of-valley disposal as an option is contrary to the recommendations of the SJVDPMP and to the CALFED solution principle that "solutions will not solve problems...by redirecting significant negative impacts...within the Bay-Delta or to other regions of California."	USEPA	3/19/97	
Sources of Water Quality Problems	Page 1 has the list of sources, page 2 states that "CALFED shall adopt a whole watershed approach" in resolving problems from these sources. As discussed at the PCT meeting, most of the rest of the text focuses solely on agricultural drainage issues and not on the other significant water quality problems listed.	USEPA	3/19/97	

D - 0 3 5 1 4 5

DRAFT
Comments from CALFED Agencies
Role and Policy With Respect to San Joaquin River Water Quality Problems - March 30, 1997 Version

Topic	Comment	Person/ Agency	Date	Response
Actions	Page 3, sixth bullet: We are concerned with the language that CALFED will support "1990 Plan recommendations that are currently being implemented...(or) that have local and SJVDIP support." The actions included in the 1990 Rainbow Report represent a package of many actions addressing a range of approaches; it is inappropriate for CALFED to now pick and choose only certain actions that <u>other</u> parties endorse. If CALFED wants to select or incorporate certain actions into the program, the agencies need to conduct a thoughtful and careful analysis of the original package of actions and determine which actions to include. The issue of land retirement is one that merits further discussion and consideration by CALFED agencies.	USEPA	4/17/97	
Approach	The paper identifies the SJVDIP as the primary entity addressing agricultural drainage issues in the short-term and embraces its approach (bullets 4, 9). CALFED agencies should be provided information about the efforts of the SJVDIP and its 1997 Activity Plan to determine whether we want to endorse their approach and "facilitate its implementation." Such an action should be taken through the official CALFED channels.	USEPA	4/17/97	
Central Valley RWQCB Activities	This paper should also describe some of the Regional Water Board's activities in the area. In addition to participation in the Grasslands Bypass Project, the Board staff have proposed a TMML for selenium for certain reaches of the San Joaquin River.	USEPA	4/17/97	
Grasslands Bypass Project	There is no mention of activities underway involving the Grasslands Bypass Project, which is also addressing agricultural drainage issues in the short-term. Discussion of program included.	USEPA	4/17/97	
Leadership Role	The roles and responsibilities highlighted in this paper is somewhat confusing. For example, the first two bullets on page 2 state that "CALFED will assume a leadership role in facilitating implementation..." Does this mean CALFED agencies, CALFED staff, or some anticipated future CALFED institution?	USEPA	4/17/97	

DRAFT
Comments from CALFED Agencies
Role and Policy With Respect to San Joaquin River Water Quality Problems - March 30, 1997 Version

Topic	Comment	Person/ Agency	Date	Response
Source Control	Page 3, eighth bullet: It is stated that CALFED endorses and supports the MOU on efficient agricultural water management practices "as a means of implementing the source control recommendations of the 1990 Plan." This could be interpreted to mean that CALFED agencies view this as <u>the only</u> means to accomplish source control. This bullet should be deleted or the list of activities should be greatly expanded.	USEPA	4/17/97	
Watershed Approach	Page 3, third bullet: Discusses adopting "an overall watershed approach for encouraging comprehensive solutions to....water quality problems..."; truly comprehensive solution should address more than just water quality. We suggest the following additional language: "CALFED will promote on-farm management practices that reduce chemical inputs that may impact water quality while improving agricultural production."	USEPA	4/17/97	

D - 0 3 5 1 4 7

DRAFT
Comments from CALFED Agencies
Role and Policy With Respect to San Joaquin River Water Quality Problems - May 6, 1997 Version

Topic	Comment	Person/ Agency	Date	Response
Activity Plan 1997	Page 2: While adding the discussion of the 1997 Activity Plan, the discussion of the UC salinity program was jumbled leaving the rest of the paragraph confusing.	Tom Maurer, USFWS	5/30/97	
Central Valley RWQCB Activities	Page 3: The language describing the Regional Board's activities should be checked by Board staff to ensure accuracy.	USEPA	5/21/97	
Grasslands Bypass Use Agreement	The Grasslands Bypass Use Agreement and Oversight Committee, respectively, should be referenced in bullets 4 and 5.	USEPA	5/21/97	
Grasslands Bypass Project	Page 2, bottom paragraph: The inclusion of this paragraph improves the description of the current activities in the Valley. Since adoption by the Board of Waste Discharge Requirements for the bypass is not a certainty, using the word <u>proposed</u> rather than <u>adopt</u> may be a better way to phrase the sentence at this time.	Tom Maurer, USFWS	5/30/97	
Land Retirement	Page 2: The broad term "land use changes" we assume includes land retirement. Land retirement can be an extremely effective program to reduce selenium discharges, as well as selective fallowing and nonirrigated agricultural practices.	Tom Maurer, USFWS	5/30/97	
Salt Loads	Page 3, sixth bullet: It is stated that "...CALFED will encourage consideration of various mechanisms for removing salts from the Valley..." The phrase "removing the salts from the Valley" should be deleted. USEPA cannot support the exportation of salt loads from the San Joaquin Valley to another geographic area. CALFED should support and promote in-valley solutions that will <u>reduce</u> salt loads and not just transfer these wastes elsewhere. In fact, promotion of out-of-valley disposal is inconsistent with CALFED's solution principles.	USEPA	5/21/97	

DRAFT
Comments from CALFED Agencies
Role and Policy With Respect to San Joaquin River Water Quality Problems - May 6, 1997 Version

Topic	Comment	Person/ Agency	Date	Response
Solutions	Page 1, paragraph 1, and page 3, bullet 6: The discussion of out-of-valley solutions, Tulare Basin, and removing salts from the valley appears to be stretching the arms of CALFED beyond its intended purpose. There seems to be a conflict with the "removal of salt from the Valley" with CALFED's solution principle regarding redirection of significant negative impacts. The discussion of the Tulare Basin implies promotion of a valley-wide drain which is a proposal lacking any detail much less an evaluation of any sort. Considering it an "ideal solution" seems inappropriate to me. Ideal solutions for the two areas may not be linked close enough to warrant CALFED's involvement with Tulare Basin issues. The most important thing CALFED can do is concentrate on the in-valley solutions. If CALFED is flexible and uses adaptive management, then issues regarding Tulare Basin and out-of-valley solutions that may impact the Delta can be addressed.	Tom Maurer, USFWS	5/30/97	

D-035149

DRAFT
Comments from CALFED Agencies
Role and Policy With Respect to San Joaquin River Water Quality Problems - July 1, 1997 Version

Topic	Comment	Person/ Agency	Date	Response
General	Page 2: the acronyms depicting agency names used in the second sentence should be spelled out at the time of their first usage.	USEPA	8/4/97	
General	Page 4, first paragraph: Replace SJVDIP" with "existing entities."	USEPA	8/4/97	
General	Page 3, first paragraph: The level of detail contained in this paragraph is inconsistent with the rest of the paper and seems unnecessary. The status of this particular court case is rapidly changing and this paper is already out-of-date. The entire discussion should be eliminated.	USEPA	8/4/97	
Drainage Oversight Committee	"Drainage Oversight Committee" should be changed to "Grasslands Bypass Channel Project Oversight Committee."	USEPA	8/4/97	
Grasslands Bypass Project	Page 3, fourth bullet: The Grasslands Bypass Project Use Agreement should be included in the list.	USEPA	8/4/97	
Grasslands Bypass Project	Page 2, last paragraph: The second sentence should be replaced with the following: "The agreement requires participating irrigation and individual drainage district to meet specified monthly and annual selenium load values. The Use Agreement allows for use of the Drain for an initial 2-year period; the agreement may be renewed for up to three additional years provided the Regional Board has adopted an approvable Basin Plan amendment and Waste Discharge Requirement for the Project, and that the draining parties have developed a long-term regional drainage management plan. The time frame for extending the agreement beyond the initial two years is dependent upon the amount of time necessary to complete the environmental documentation to implement the long-term plan."	USEPA	8/4/97	

D-035150

DRAFT
Comments from CALFED Agencies
Role and Policy With Respect to San Joaquin River Water Quality Problems - July 1, 1997 Version

Topic	Comment	Person/ Agency	Date	Response
Potential Measures	Page 2, first paragraph: The listing of potential measures in the last sentence of the first paragraph should be reordered such that "drainage reduction and reuse" is the first in the list. Since the order of measures may be interpreted by a reader as a prioritization amongst the measures, drainage reduction and reuse should precede "timed drainage release" and the other measures.	USEPA	8/4/97	
Purpose	We continue to question why CALFED is developing this issue paper. In March, the Program Coordination Team was told the purpose of the paper was to clarify CALFED's intent to focus on San Joaquin Valley problems, and not to choose Tulare Basin. Yet, the focus and tone of this paper goes well beyond this scoping and raises a number of other issues. What is its primary purpose? How will this paper be used and reflected in CALFED documents and programs? The title infer that the paper will be a broad discussion on the broad range of pollution problems in the San Joaquin Basin. The rest of the paper focuses exclusively on agricultural drainage and salinity problems. We are very concerned about the emphasis on the desire to export salts out of the San Joaquin Valley. While we appreciate the removal of references to out-of-valley solutions from the bullets articulating CALFED policies, there is still an inappropriately heavy emphasis on exporting salts out of the valley in the introductory, background text. CALFED should not move ahead with this issue paper without clarifying its intent and usage, and modifying the tone and content accordingly.	USEPA	8/4/97	
SJVDP 1990 Plan	Page 2, third paragraph: The third sentence discussing the Plan mischaracterizes that report's discussion on salt removal. The sentence should be replaced with: "The SJVDP 1990 Plan states that 'It appears that in-valley actions can manage the problems for several decades without a means of exporting drainage-related salts to the ocean. Ultimately, it may become necessary to remove salt from the valley.'" Reference page 1 of the Plan. The report further states that 'If salt export becomes necessary in the future, the actions recommended in this plan could create prerequisite conditions by providing collection facilities, by reducing drainage water volumes, and by isolating and controlling contaminants.'" (Page 4 of the Plan)	USEPA	8/4/97	

DRAFT
Comments from CALFED Agencies
Role and Policy With Respect to San Joaquin River Water Quality Problems - July 1, 1997 Version

Topic	Comment	Person/ Agency	Date	Response
Solutions	Page 3, fifth bullet: The last sentence calling for the implementation of the "interim solutions endorsed by the SJVDIP" should be deleted. CALFED endorsement is not appropriate at this time.	USEPA	8/4/97	

D-035152

DRAFT
Comments from CALFED Agencies
Role and Policy With Respect to San Joaquin River Water Quality Problems - Version Unknown

Topic	Comment	Person/ Agency	Date	Response
Approach	The description of the cooperation with the San Joaquin Valley Drainage Program creates the implication that it is the whole of the CALFED Water Quality Program in the San Joaquin system. While we recognize this strategy paper is driven by the need to explain the relationship between CALFED and the Drainage Program, one of two approaches need to be adopted. One is to define the paper as dealing only with the subsurface agricultural drainage issue. The other is to describe the strategies CALFED plans to use with all six problem areas listed on the first page. We lean towards the latter, but recognize that the former is probably viable for the purposes of driving the paper.	Pete Chadwick, DFG	3/21/97	
Approach	Two general changes are needed in the treatment of the Drainage Program. Page 2, first bullet, removes consideration of Tulare Lake Basin drainage issues from the CALFED Program, the intent would be clearer if that was stated directly. It should be considered to keep Tulare Lake Basin in as it relate to how future strategies to address drainage issues in that basin may affect sustaining the recovery of a health Bay-Delta. The second change relate to the Drainage Program not having been funded very well and questions exist in the minds of some interests as to how effective it has been. We understand that the program has started to question the underlying strategy on which it was based. Namely, the underlying premise that the purpose was to implement in-valley management measures to contain the drainage problem for 40 or 50 years while a feasible permanent solution was found. Considering these issues, we question whether a CALFED strategy will be perceived as viable without addressing those issues in some fashion.	Pete Chadwick, DFG	3/21/97	
Actions	The actions focus too much on the San Joaquin Valley Drainage program and other appropriate strategies are not dealt with sufficiently.	Pete Chadwick, DFG	3/21/97	

DRAFT
Comments from CALFED Agencies
Role and Policy With Respect to San Joaquin River Water Quality Problems - Version Unknown

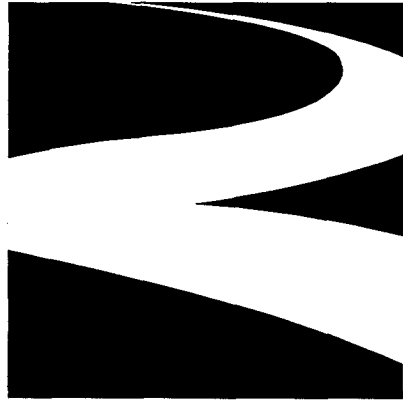
Topic	Comment	Person/ Agency	Date	Response
CALFED Roles and Policy	Is there to be a CALFED Roles and Policy with respect to Sacramento River Water Quality Problems? The CALFED Roles and Policy regarding the San Joaquin River Water Quality Problems should include a discussion of the current Grasslands Bypass Project along with recent Regional Board activities such as the 1996 Basin Plan amendment regarding the Grasslands area. CALFED should be cautious and not give unqualified support to the San Joaquin Valley Drainage Implementation Program. CALFED needs to evaluate the SJVDIP's current activities, successes, and failures before identifying those areas which CALFED can have the greatest impact. SJVDIP includes areas not within the solution area of CALFED (e.g., Tulare Basin). Specific activities, targets, and deadlines must also be identified before support can be given.	Thomas Maurer, USFWS	4/23/97	
Land Retirement	Our interpretation of SJR policy is that it applies to all water quality problems in the valley not just salt. Comments on land retirement were specific to selenium control not salt. It is the Service's assumption that the term "land use changes" identified in the statement regarding potential measures for protection of water quality and wildlife includes land retirement to control selenium.	Thomas Maurer, USFWS	6/13/97	
Priorities for Action	Page 3, bullet 1 - The extent to which CALFED gets involved with long-term salt management in the San Joaquin Valley, especially the Tulare Basin, needs discussion at the top policy level. Clarity of actions, targets, responsibilities, and leadership has been one of the stumbling blocks in dealing with drainage issues. If CALFED policies on these issues are unclear, confusion and polarization may increase.	Thomas Maurer, USFWS	4/23/97	

DRAFT
Comments from CALFED Agencies
Role and Policy With Respect to San Joaquin River Water Quality Problems - Version Unknown

Topic	Comment	Person/ Agency	Date	Response
Sources of Water Quality Problems	<p>Refineries in the Carquinez Straits/Grizzly Bay area discharge selenium that recirculates through the Suisun Marsh system. In the last paragraph, page one, "irrigation tail water from wetlands" is noted as a significant pollutant source. The Service disagrees with this characterization and we have strongly argued against this inappropriate labeling to the Regional Board during a recent Basin Plan amendment proposal. We recommend the statement be removed.</p> <p>In the last paragraph, page one, it is not clear what is meant by "dilution of salt...[with] upstream reservoir releases." Is this San Joaquin or Sacramento River (i.e., Shasta) releases? "Dilution" should be used carefully. The fact that a tributary river or tail water dilutes contaminants is different than purchasing and storing water with the explicit intent of diluting a pollutant, which is inconsistent with federal and state laws. Using the word dilution to identify real-time management is not entirely accurate and can be misleading. Dilution actions were to be considered as possible emergency actions for spill response or uncontrollable discharges, but this distinction has not been noted.</p> <p>Last paragraph, page one, include land retirement in the list of solutions. Land retirement can be an effective program to reduce selenium. Page 2, third paragraph, add "and lack of leadership" after "Primarily due to lack of funding." Page 3, bullet 4, concentrate on the in-valley solutions and make these a top priority for implementation. A distinction should be made between in-valley and out-of-valley solutions. Page 3, bullet 6, all recommendations should be considered, not just those with local support. Page 3, bullet 8, these are not the only source control methods. Specific support of one method will tend to place other methods to the rear and provide less incentive to implement them. Page 3, bullet 9, The 1997 Activity Plan needs explaining and careful review by CALFED before full endorsement is given.</p>	Thomas Maurer, USFWS	4/23/97	
Sources of Water Quality Problems	<p>There is a good list of water quality problems in the San Joaquin River. Only the second and perhaps third bullets are in the purview of the San Joaquin Valley Drainage Problem.</p>	Pete Chadwick, DFG	3/21/97	

DRAFT
Comments from CALFED Agencies
Role and Policy With Respect to San Joaquin River Water Quality Problems - Version Unknown

Topic	Comment	Person/ Agency	Date	Response
Sources of Water Quality Problems	The paragraph following the list of problems drifts from a broad statement attributing the most significant degradation to agricultural drainage and return flows to salt being the principal problem. We agree that the most significant problems are caused by agricultural drainage and return flows, but salt loads and toxics are also of considerable importance and this statement is clearly and appropriately broader than the subsurface drainage problem. While salt load is the main threat to the long-term viability of agriculture, toxics are clearly a substantial environmental threat. The paragraph should clearly distinguish between the salt and toxics problems and the various sources of both.	Pete Chadwick, DFG	3/21/97	



CALFED
BAY-DELTA
PROGRAM